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I.—THE DEFINITION OF WILL.

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No. II.

WE have defined a volition as "the self-realisation of an idea with which the self is identified," and in the foregoing article we to some extent explained the first part of these words. I shall now proceed to show what is meant by a practical identification with self. I am in the present article still forced to assume the fact of 'ideomotor' action, but the nature of this will be discussed on a later occasion.

To ask what is meant by the identification of an idea with my self, would in the end raise the whole question of the essence and origin of consciousness. We find that self and not-self are related both theoretically and practically, and we may inquire in general if these terms and their distinctions are original and ultimate. Or, if this problem is dismissed or is placed on one side, we may discuss the question of rank and priority as between perception and will. Since practice implies knowledge we may contend that the latter must come first, or we may on the other side reduce theory to a one-sided development of the practical process. We may insist again that neither attitude is higher in rank, and that neither taken by itself is original or prior. Both appear together, we may add, as essential aspects of consciousness, and we might go on to investigate their exact nature when first they appear, and attempt to trace their development from their earliest forms, if not from states

which are neither. But in this article it is not my object to pursue such inquiries. I shall take the theoretical and the practical relation of the self to the not-self as facts of experience, and shall try to point out some aspects which are contained in both, attending specially of course to the practical side. Facts of experience the reader must understand to be experienced facts, and he must not include in these anything so far as remaining outside it appears in or acts on the experienced.

If in this way we examine the practical relation of the self to its world, we at once discover the features which were set out in our definition.¹ There is an existing not-self together with the idea of its change, and there is my self felt as one with this idea and in opposition to existence. And there follows normally the realisation of the idea, and so of my self, in the actual change of the not-self; and this process must arise from the idea itself. And the process, at least to some extent, must be experienced by my self. In volition, if I attempt to find less than all this, I find that volition has disappeared. And, taking this for granted, I will go on to consider the practical relation in its distinction from mere theory, and I will try to indicate that special sense in which the self is practically made one with the idea.

(i.) The not-self, we have seen, is an existence, and this existence is for me. It comes before me or comes to me as a perceived other or as an object. Now in the practical relation it is important to observe that this 'other' has two senses, and that only one of these senses is found in mere theory. It is in the sense common to theory and practice alike that I am going first of all to consider the object. The perceived object, we may say, on the one hand comes as something which *is* independently, and on the other hand it is felt as something which *is* for me. I am not attempting here, the reader will understand, to explain or to justify the apparent facts, but am endeavouring merely to describe them. The object *is* in a sense which is not applicable to the whole felt moment, for, while the object is felt, it is also experienced as other than the felt self. It is therefore for me as something which is not myself. But to say that its relation to me is an object, or that my passivity towards it is an object, would certainly be false. How far these aspects may become objects at a later time and for reflexion, I do not here inquire; but at first and in their essence, while we

¹ MIND, N.S., No. 44. The reader must also be referred here to the article on Conation in No. 40.

confine ourselves to the theoretical attitude, they certainly are not objects. In the 'felt-mine' of the moment the object appears as something other than the rest, but its relation to the rest, if we are to speak of its relation, is a matter of feeling.¹ That relation with both its terms must fall within what is experienced, but only one term of the relation is experienced as an object. The not-self so far appears as an other but not as an opposite.

(ii.) In the practical relation the aspects we have described above are still to be found, but another feature is added which transforms the character of the whole. This feature is the opposition between self and not-self. In my practical attitude I experience myself as something contrary to the object. I do not merely receive the object and feel it as mine, although other than me, but I also feel myself as something which is opposite and struggles to change it. And in this total feeling both the not-self and the self are present now as contrary realities. The relation with both its terms now appears before myself as two objects, but in what sense I am an object to myself we must go on to inquire.

In my practical consciousness there is a relation, we saw, between the not-self and an idea. This idea is the idea of a change in that object not-self, and the idea in its conflict with the not-self is itself an object for me. Hence a relation with both its terms is now before me as an object perceived. But this relation on the other hand is not merely a new perceived object. For I feel myself one with the idea in a sense in which I am not one with that object which opposes it, and therefore in and through this idea I feel myself in collision with that object, which has thus become in a further sense something alien and not-self. And my felt oneness with the idea and felt contrariness to the conflicting existence are not two separate facts but are inseparable aspects of one fact. Whether in any sense opposition can otherwise be experienced and known I do not here inquire, but except through an idea there is no opposition if that is really practical and means will. And this is a point which has perhaps been sufficiently discussed in previous articles. The practical relation depends on an idea, an idea with which in a special sense I feel myself to be one, and this idea is an object and it conflicts with an object. But, as for myself, I am not properly an object

¹ I should perhaps remind the reader that I do not accept the restriction of 'feeling' to denote merely pleasure and its opposite.

to myself except so far as I enter into the content of this idea. How far I must so enter is however a question which must be deferred for the present.¹

(iii.) This practical identification of self with the idea may be called specific,² and we cannot explain it in the sense of accounting exactly for its quality. On the other hand we can indicate the distinctive feature which it adds to mere theory, and we can show some conditions which its presence implies. This may be done most clearly perhaps in reply to a possible objection. "The self," it may be said, "is identified alike with every one of its contents, and, as to the idea, you admit that the idea is an object and a not-self. Is not then the special oneness of the idea and the self something which in the end is meaningless?" In replying to this objection I shall have in part to repeat what I have put forward already.

In the practical relation we can find in the first place an existing not-self. There is an object, and it is felt as mine though as other than me. And we have in the second place an idea which conflicts with this existence. This idea once more is an object, and it is felt likewise as mine, and felt likewise again as other than myself. And so far we have no aspect, it may be said, which is not found in mere theory. For we have two objects in relation or two elements of one complex object, and each of these is mine and is not-mine in precisely the same sense. But we have so far left out of sight the essential and differential feature of the case. The idea in collision with the existence, although it is an object and a not-self, is also, in its conflict with the existence, felt specially to be mine and to be one with myself. Hence this special feeling attaches itself to but one of the two objects before me, and it qualifies that one in its actual opposition to the other. The existence therefore, being opposed to what is specially one with myself, becomes *ipso facto* itself opposed and contrary to me. And I, in my union with the idea, am in conflict with existence. And

¹ This is the question as to how far self-consciousness is present always in will.

² We must however be careful to avoid exaggeration on this head. I consider that apart from the practical attitude the self can be aware of the agreement or disagreement of its own felt content with that of the object before it. I think that such a sameness or difference may be felt, and the feeling then translated into a judgment. And, if this were not possible, we should I think find it difficult to account for some aspects of self-consciousness. This is a matter however with which I cannot deal here.

thus by one and the same means the idea, though a not-self, is felt as myself, and the opposing existence becomes a not-self at a higher remove. It thwarts the self in the idea and is so experienced as in collision with me.

I have explained that I assume nothing as to any temporal or other priority, and I am far from maintaining the possibility in fact of a mere theoretical attitude. But to the reader, who will not forget this necessary warning, I will offer what follows as perhaps a help to a better understanding. Let us suppose a self with an existing object, and let us suppose that the contents of the self and of its object are discrepant. The felt content of the self will here be hindered in fact by the not-self, but the self so far will not know that itself is hindered. It will on the other hand feel the uneasiness of its checked expansion and its object will become disagreeably qualified. But now let us suppose further that the main aspect, in which the self is hindered, itself qualifies the object inconsistently with the object's existence, and so itself becomes an idea for the self. With this the whole situation is forthwith changed. In this idea we have now an object in collision with existence and hindered by that. And the self now feeling itself to be specially at one with the idea, itself is hindered by existence and is aware of the hindrance. And the existence in this way has become not merely other but opposite. We in short have risen into the level of actual conation and will.¹

(iv.) The actual volition, we have seen, is the alteration of existence so as to agree with the idea. The existence, we may say, is changed by the idea to itself, and in the same process the self as one with the idea realises itself in the not-self. This process of self-realisation must up to a certain point be experienced as such by the self, and the self must become aware also however momentarily of the resulting harmony and peace. My world in a completed volition is not merely something which is there for me and which agrees with itself. My world has become so far the existing expression and realisation of my own self. And, so far as this result goes, the not-self persists only as the medium and element in which I have carried out and am satisfied with my being. It will repay us once more here to contrast the practical with the theoretical mode of consciousness. In the practical relation both self and not-self are alike qualified discordantly by the idea of the change.

¹ I will once more here refer the reader to my previous articles in *MIND*. Cf. also *Appearance*, pp. 606-607.

There is on each side a discrepancy between existence and idea. The idea both is and is not the adjective of the not-self; and the same thing again is true in the case of the self. From the one side as limited by actual existence I am not changed, and on the other side I feel that I am qualified by the idea of the change. I feel myself one with the ideal change in its opposition to the actual existence. Hence the process which carries out into fact the content of the idea, realises for me my inmost being which before was ideal. And because I am aware of the idea as itself making the change—a point which will shortly be discussed and explained—I am aware also that this change is the work of myself. In the result therefore I have expressed myself harmoniously on both sides of the relation.

The attitude of theory presents us here with an important contrast. The theoretical not-self, as we so far find it, may be discordant in various degrees, and the reality may more or less conflict with the idea which endeavours to express it. And in this discordance, since it qualifies me, I may suffer internally, and by its removal, so far as it is removed, I may feel myself expanded and satisfied. But the process here is experienced as in the main the self-realisation of the object. The process can hardly be alleged to be made by the idea, and most certainly the process is not made by myself. My self in one with the idea is not opposed to the object, but on the contrary I follow the fortunes of the not-self, and receive from that inactively my part in its failure or success. I may will to think and to perceive, and in some thinking and in some perception there is doubtless will. But this will is not aimed at an alteration of the object itself. Its end is the appearance of the object in me as apart from any will of mine the object is real. And an attempt to make the truth other than it is by my will would at once subvert or at least transform my position as perceiving or thinking.

(v.) There are several points on which I will now endeavour to obviate misunderstanding. The existing not-self is not always my external world, but may consist in any existence of and within myself which is opposed to me.¹ We have here within the whole, which is felt as my present being, the opposition of two objects. We have the idea of a change in some existing feature, and together with this first object comes the feeling of myself as specially one with the change. But, on the other side and as a second object, we have the actual feature of myself as I exist in fact, and

¹ Cf. here my *Appearance*, p. 97.

this second object is a not-self which is opposed to the idea and to myself. And we have then the process in which the inner self carries itself out into this not-self. Everywhere, to pass from this special instance, we must bear in mind a general result. An element, which in one sense is a not-self, may in connexion with an act of will take a different position. And this is a point to which I must invite the attention of the reader. The not-self in a volition is always more or less particular and limited, and it is limited, we may say, for the purpose of the volition. Beside those internal feelings which have not even the form of a not-self or object, there will be tracts even of our outer world which for the moment will share their position. They will not make part of that not-self which opposes the idea and our volition. They will on the contrary fall back into that general mass which is felt as myself, a mass which in various degrees qualifies me as in the idea I oppose myself to the not-self and so carry myself out. In will (to repeat this) the not-self which conflicts with the self is but one part of my world. The rest will lie within that self which is one with the idea, and will to a varying extent in the conflict support the idea and the self. On the whole, we may say, and in the main there is between my world and my will no discrepancy, and, if it were otherwise, life could hardly be lived. Even the extreme case of suicide throws no doubt on this truth. For there is never even there an opposition between my world and the mere will for its negation. The conflict on the contrary is always between various elements within the self and its world, and it is this whole which in exceptional cases is distracted fatally. The same general result holds good also, but with a difference, in the case of the theoretical relation. The object for perception or thought is never the mere whole reality. Our object is a partial appearance in which and as which the reality is for us, and in the end the opposition is between the concrete reality felt as a whole and this its partial appearance.¹ But in this conflict I as distinct from my world cannot actively take part. In will on the other hand the conflict is between myself, as expressing the main reality and the true self and as identified in feeling with the idea of a change, and over against this some exist-

¹ An idea is false, we may say, in so far as the reality cannot be expressed by it without conflict, and a will is bad in so far as the idea fails to express the genuine nature of myself. In this article I am concerned only, it will be understood, with the formal essence in which all volitions agree, and I pay no regard to any 'substantial' or 'material' differences between them.

ing particular feature of the whole. And this feature, we have seen, as thus contrary to me is in a special sense alien and not-self.

(vi.) I will pass on from this to emphasise two points of importance. In the first place both self and not-self must in volition have a concrete content, and both must be actually experienced in their own proper nature. We must have an experienced relation between two experienced terms, and, if it were not so, volition would not be 'a fact of experience'. If it were not so, an experience of activity or passivity, or of self and not-self, would become unintelligible, if at least we mean by such an experience the awareness of these things in their own proper characters. We should in each case be speaking of something about which by the conditions we could have no knowledge. And the reply that other men, though not the present writer, can distinguish between the fact of activity and the awareness of that fact, is to my mind irrelevant. For it would hardly follow that we may speak of activity and of will as existing there where by the conditions we could not possibly be aware of their existence. Such a knowledge, if maintained, seems at least to require some explanation. And it is surely misleading. I would add, to term activity a fact of experience, if it does not itself fall within that which is experienced.

In will the terms and their relation and in short the whole process is experienced, but this process in all its aspects is not experienced in the same sense throughout. (a) The existence and the idea of its change, we have seen, are both objects. And the self is an object to itself so far as it is contained in the idea—a point to which we shall presently have to return. And the self again, as itself carrying itself out into fact, must to a certain extent be perceived as an object. But however much these aspects of the whole come before me as objects, they are none the less experienced also as elements felt within the 'now mine'. And (b) this experience of my total present is itself not an object, and it cannot in the end even for reflexion become an object throughout. And (c) the same result holds of my identification of myself with the idea. The felt oneness of my inner self with the idea of the change cannot become an object, unless we go beyond and unless we so far destroy will. It does not matter how much my self has passed beforehand into the content of the idea, and it does not matter how much my self perceives itself as carried out in the act. In the end my union with the idea must remain essentially a felt union, and, so far as by reflexion it be-

comes an object, volition so far has been superseded and has ceased to exist. I do not deny that this union, while being felt, can perhaps to some extent also be an object, but it is merely as being felt, I contend, that it moves. Its partial appearance in reflexion, so far as it appears there, impedes it. And in the end no reflexion can bring it before me in its experienced integrity. The same conclusion, I may add, holds good of self-consciousness in general. An exhaustive objectification of the present self remains in principle impossible; but this is a matter on which we are unable here to enlarge.¹

I have now endeavoured to explain how in volition I am identified with the idea and opposed to the not-self. I have still to ask how far my self enters into the content of the idea, and together with this question I shall have to inquire into the experience of agency. But, before I enter on this subject, I will endeavour to dispose of some remaining difficulties. I must deal briefly with the nature of reflective volition, and in connexion with this will remark upon Choice and Consent. And I will open the discussion of these points by stating a probable objection.

"Your account," it may be said, "whether so far it is satisfactory or otherwise, applies to will merely in its first and undeveloped form. But will in the distinctive sense is not found at that level. I do not really will until I suspend myself and consider my future course, and then assert myself in something like choice or consent. This is the essence of volition, and, however much your account may be laboured, this in the end falls outside your definition of will."² Now I cannot here attempt even to sketch the development of will from its lowest form upwards. But in its highest form certainly no principle is involved beyond those which in our account we have set out already. And I will endeavour very briefly to show how this is true. I will then

¹ I cannot accept without qualification the statement that we are self-conscious in the practical attitude and in the theoretical attitude no more than conscious. Not only in my opinion do we fail everywhere to be completely self-conscious, but I could not admit without some reserve the doctrine that all self-consciousness is in its essence practical. The above statement however expresses, if it exaggerates, an important truth.

² The same objection could be urged about our higher and lower will, our divided will, our attention, and so forth. I have already treated these cases so far as is necessary in *MIND*, N.S., Nos. 41 and 43, to which latter article I may refer specially for some illustration of what follows.

point out the proper meanings of Choice and Consent, matters on which some dangerous confusion appears to prevail.

In the higher form of volition (so much cannot be disputed) we come upon a most important difference. Our will at this stage has become reflective. I do not here identify myself immediately with this or that practical suggestion, but on the contrary I regard these as things offered to me for my acceptance or rejection. This does not mean merely that I am inconclusively moved by conflicting ideas, and that I fluctuate and waver in their ebb and flow. And it does not mean that I am held motionless by balanced forces or paralysed by shock. The ideas are not mere forces which in me produce states of motion or rest. They are objects which I separate from myself and keep before me at will. The suggestions so far are mine, and again in another sense they are not mine, and their adoption in short lies entirely with myself. Of all the suggestions offered I may accept none, and, when I accept one, I do not merely become what is offered. I actively adopt the idea, I take it into myself, or, if you prefer the phrase, I put myself into the idea. This is a specific act, and with it comes a mode of feeling which is specific. And this by an exaggeration has been emphasised as a fact irreducible and unique.

The exaggeration being omitted I think the above statement is correct, but I claim that the facts are embraced by our definition of will. Indisputably the self is able to rise above suggestions. The self can in a manner alienate these from itself, and then, if it does not reject all, can adopt one of them formally. And it is desirable, I am sure, to lay stress on these facts. On the other hand I cannot take the facts as a kind of supervening miracle which, I know not how, is to prove something—it seems not easy to say what. The self can suspend itself, but, as soon as we inquire into the means, there is an end of the miracle. The means we can discover in every case to be a higher idea, and this higher idea, at least in one of its aspects, is the negation of the particular suggestions. It is with such an idea that in reflective will our self is identified. And the consequence, that has been described above, is the natural result. Given a further and a remoter principle, not in union with the suggestions offered, or not in union at once and immediately with these suggestions as they are offered, and the principle of suspension and of adoption is present. The idea may be of a special end which must be reached by some particular method, and cannot unite itself at once with two methods however much both belong to it. Or the idea

again may be a principle which is general and abstract, and it may, for instance, consist in a rule of not at once deciding on offered suggestions. But, whether more or less abstract, the idea always works in the same way. My self is identified with it, and is hence related to the detail which falls under it. And my self is related to this detail positively, and also, as we have just seen, negatively. Hence my self can confront the detail as a spectator and can hold itself aloof. Then, as soon as one particular (however this happens¹) becomes superior to the rest, and appears as the means by which the principle can pass into reality, the situation is changed. The self in one with the principle comes together with this single particular, and it feels itself reunited with its object by an act of adoption. And here is the origin of that felt estrangement and aloofness and of the following awareness of reunion. These experiences certainly are specific, and it would be strange if they were not so; and you may call them irreducible, if you mean that from their conditions they could not wholly be constructed. But, unless the doctrine just advocated is seriously wrong, these experiences are neither unique nor exceptional.²

If we take our stand on the principle which has just been laid down, we may without difficulty apprehend the essence of choice and consent. Choice, to begin with that,³ is (a) in the first place not merely intellectual or perceptive. A process which ends with a judgment, even if that judgment is about the means to an end, is so far, we must insist, not a genuine choice. The process is so far not choice, even if it leads to the conclusion 'I like this best' or 'this is nicer'. Distinction by a type and the selection by a type of one thing to the exclusion of another, if you take this process as issuing in a judgment, is, taken so far, not choosing. Choice in a word essentially is will. It may be incomplete

¹ This question is to some extent dealt with in a preceding article, *Mind*, N.S., No. 43.

² It would be well I think if those who maintain that they are so, would explain how much in psychology is *not* exceptional and unique. We have again, with a difference, the same experience of alienation and reunion when after suspense and doubt an idea is accepted as true. The conditions here, as we have seen, are partly diverse. It is here the not-self which first rejects and then reunites itself with the idea, whereas in will this is done by the self which is opposed to the not-self. The conditions and feelings in both cases may be called the same generically but not altogether. We shall once more notice this difference when we deal with the subject of Consent.

³ The subject of disjunctive volition will be briefly discussed in the article following this.

volition in the same sense in which Resolve was incomplete will (MIND, N.S., No. 44), but a choice always and without exception is an actual willing.

(b) In the second place a choice must be made between at least two things which move me. It involves a preliminary suspension, however brief, and that suspension comes, at least usually, from conflicting desires. But choice always and without exception is between two or more moving ideas. I may indeed be ordered to choose before I begin to desire, and in this case the suspension may be said to start from the suggested idea. But the choice, when it takes place, takes place always in essentially the same way. The suggested idea moves me as I am moved by my own idea of an ulterior end, and in each case I have before me two opposite means which prevent instant action. The means in every case must be identified with the moving end, and, if you use 'desire' here in a widened sense, the means in every case must both be desired. The fact that apart from this identification they may be indifferent or even repulsive, does not raise really the least difficulty.

(c) We have to choose 'between' things, and the 'between' implies that one thing is rejected. To say 'take one' and to say 'choose one' are different requests. Unless the idea of rejection is implied, and unless for the chooser this idea qualifies the act, we cannot predicate choice proper. If in short the 'between' does not come or does not remain before my mind, I may take one out of a number but I most certainly do not choose it. But the 'between' may be present to my mind in various senses and degrees, and let us consider first an instance where it is highly developed and explicit. Here I desire an end to be realised in one of two alternatives which I recognise in that character. Each of these therefore is qualified to my mind by the exclusion of the other. I consider these first in relation to my end as contrary means to its attainment, and I then pass a judgment on both, and in consequence will one of them. But it would be absurd to contend that the whole of this is essential to choice. For there need be no judgment, there need be no idea of means in relation to end, and there need be no foregoing idea of an end. The essence of choice implies no alternatives in the sense of disjunctives, and I will now go on to seek the minimum which is really essential. In this minimum there must be two ideas which move me incompatibly so that neither is realised. In the second place I must not merely oscillate from one idea to the other, but notwithstanding their discrepancy I must desire

both objects at once. The main idea which moves me must be felt to be present in each, and it therefore, in relation to each, is a higher idea. If upon this follows my identification of myself with one of these objects, and so my volition, the act is choice if it is qualified by the idea of rejecting the other. If on the other hand any feature in the above account be wanting, I no longer in any proper sense have chosen. A child desires two lumps of sugar, and from some cause perceives that both at once are not possible. Each piece excites the pleasant idea of taking and eating, and both still do this when an attempt to take one piece has brought in, and checked itself by, the perception of losing the other. The impracticable 'both' which is desired is in fact the cause of a moment's suspension. Then through the pressure of appetite or from some other cause an action ensues, and the idea of taking now is actually realised. But whether the child has really chosen remains uncertain, and it entirely depends on the following condition. Was the idea of leaving one piece an element present in the act, or did for the moment the idea of this piece disappear simply? Choice in the latter case will be absent, while in the former it exists. There is choice because the idea, which acted, in the first place qualified both pieces, and then one piece with the aspect of leaving the other. And so much, I contend, is essential to choosing. On the other hand there is contained here no idea of an end with its means, and certainly no judgment that one piece is nicer or is wanted by me more.¹ To resume, when I choose I must have before me two ideas under one head, and one of these ideas, when I act, must be qualified as excluded or at least as absent. If I merely lose sight of one idea, I have not really chosen. Hence choice cannot appear below a certain level of mental development, and most obviously it does not constitute the essence of will. Choice is perhaps not reached at all except in the case of human beings.

I will go on from this to remark upon the meaning of Consent. Prof. James (*Psych.*, ii., 568) has used this term to express the ultimate fact in action and belief.² I have already explained how far I can agree to call such experiences ultimate, and I will now point out why in the case of either action or belief the use of consent is really

¹ Mr. Shand, in *MIND*, N.S., No. 23, pp. 301 foll., appears to me to have seriously misapprehended the facts on this point.

² I do not know if this was suggested by Lotze's use of *Billigung*, *Med. Psych.*, p. 302. I have already remarked on approval, *MIND*, N.S., No. 44, p. 453.

indefensible. In the first place my consent is given always to a foreign force, and in the end it is given always to a foreign will. In the second place consent is not my mere awareness that something is to come from this will, but it implies necessarily that to some extent I am responsible for the result. If, where I might have hindered another's act, I have not attempted to hinder it, I may be taken as a condition of the act and therefore so far as its cause. On the other hand to call such consent my volition of the act would be too untenable. And Prof. James, excluding such tacit consent, finds the essence of will in the consent which is express. But while there is volition here certainly, so far as I will to express my consent, there is as certainly no volition of the act itself. And my consent never can amount formally to a volition of the act. Always in consent is interposed the idea of a foreign agent, and, however much by my consent I make myself a condition and so assume responsibility, I never, as consenting, am the real doer of the act in question. To give consent to an action, however expressly, stops short of uniting with another to will and to do it.¹ And consent is inapplicable to a common

¹ Consent can of course be given in such a way that it amounts to an incitement, and it can be given in such a way as to have the opposite effect. But these effects, I submit, go beyond and fall outside of a bare consent.

A further inquiry into the nature of consent is not necessary here, but the following remarks may perhaps be of service to the reader. The difficulty of defining consent does not lie merely in the uncertainty of the particulars, but attaches itself also to the general idea. Consent is a positive attitude of mind which must exist positively to a certain degree. But on the other hand that degree is determined only by negation and by omission.

Consent is a mental attitude of one agent towards the act of another. The first agent must be aware of the act, and up to a certain point must share the sentiment from which it proceeds. That point is fixed by the presence of abstention from resistance to the act as proposed or from attempt to nullify it if existing. As consenting I am dominated by a sentiment in accordance with the act, so far that either a feeling of hostility to it does not arise in my mind, or, if it arises, is prevented from carrying itself out. The result is that I do not oppose the act.

It is a further condition of consent that (a) the act must be taken by me as in some sense to concern me, and (b) some kind of opposition is in my power, or taken by me to be so. The act must fall within the region which I take to be the sphere of my will, and in this sense must interest me. And some kind of volition to oppose the performance or continued existence of the act is always possible here.

Consent must be distinguished from approval. Approval (a) extends beyond my personal concerns, and (b) involves some reference to a standard. In these two senses it is impersonal and disinterested.

Consent, in order to remain consent, must stop short at a certain point. If it becomes more than a positive state of feeling, measured

volition, because it implies that the actual will does not cease to be foreign. This idea of foreignness in the will from which the action proceeds cannot be removed from the meaning even of express consent. And hence as an expression for the essence of will consent is most inappropriate. My will is surely not the action of a foreign force in me, nor can it consist in my permission of such an event. Suggestions, we have seen, can in volition come before me as a not-self, but, if, starting from this, I do not go on to make them mine, I have assuredly not willed. And in the presence of a great alternative, where I adopt one course with all the energies of my being, and throw myself, as we say, entirely into the carrying out of one event, to insist that all I do is to give an express consent to this event somehow happening in me, seems really ridiculous.¹

and defined by abstinence, and if it passes into an attempt to further the act or commit it in common, it has ceased so far to be mere consent.

It is obvious from the above that the positive state of consent itself is not properly an act and is not itself willed. It might itself be willed as a psychical effect, but as such it would be only the effect of a volition other than itself. On the other hand, the signification, to another or to my own mind, of my state of consent can obviously be willed. And that abstinence from opposition, which is one aspect of the consent, can itself again be willed. I can will to behave consistently as consenting without any ulterior end in view beyond this behaviour as following from the consent.

If on the other hand my behaviour, as consenting or again as signifying consent, is willed as a means to the performance of the act in question, I have (as we have seen) passed beyond simple consent. I now have furthered by my act the act of another, and may even have joined with him in committing it. And the result here will be no longer the mere effect of my consent; it will be that effect as contemplated by me and set before me as my end. The mere foreseeing by me that in fact the effect will follow must be distinguished from this; and the difference between the two lies in the nature and action of the idea which in each case is before my mind.

Thus, even in theory, the mental state of consent is not easy to fix, while in practice the difficulty seems well-nigh insuperable. The difficulty here lies mainly in knowing the exact nature of that to which at the moment consent is given. For the consent is given to something as it appears at one moment to the consenter, and as at that moment it is qualified by his feelings. But the exact nature of such an impression, as it happens in another, can be arrived at only by approximation and always presumptively. The difficulty again as to what is to be taken as and presumed to be a willed or unwilled indication or signification of consent, can only be disposed of roughly.

¹ The reason why Prof. James with all his insight is led to advocate this absurdity is, I venture to think, at once clear and instructive. Prof. James, as I have noticed before (*MIND*, N.S., No. 43, p. 297), seems to approach the facts of the soul with a mind too much dominated by

Consent, we have seen, does not go far enough for volition, but for belief on the other hand it goes a great deal too far. In the theoretical relation the object comes to me as something foreign, but I can hardly give consent to the object's being in character what it is. I accept the fact that the angles of a triangle are equal to two right angles, but to give my consent or permission is not in my power. It is a fact which I cannot help or hinder, and for which I have no responsibility. I can of course will the appearance of the truth in my mind, but I cannot will the actual truth itself to be this rather than that. The attempt would obviously at once destroy my theoretical attitude. And even my attitude when I will to receive whatever is the truth in itself, cannot be defined as my express consent to that reception. For, if I actively will the reception, I do much more than consent to it. Consent in short for will is too little, and for mere belief is too much. Truth, I agree, is the satisfaction of a want in my nature, and the criterion, I agree, in the end may be called a postulate. There is no attitude in fact which is simply theoretical, just as there is no attitude in fact which is barely practical. But after all there is a difference between thinking and doing, and a difference which happily is ascertainable. And this ascertainable character on either side alike refuses to be described as consisting in consent.

We now approach a difficult part of our subject, the question how far in will the self enters into the idea of the change; and we may connect with this question a brief inquiry into the meanings of activity and agency. The reader, if he is unable here to accept our result, will, I hope, at least find matter which deserves his consideration. We have seen that the end of will, when that is completely realised, need not involve throughout the knowledge or even the existence of the agent. The necessity for my awareness in all cases of my own volition cannot in short hold except of the beginning of the process. As that process starts from

mechanical metaphors. What moves in the soul is forces external and foreign. And when in use such principles fail, and Prof. James sees their failure, instead of rejecting them as disproved he attempts to help them once again from the outside. My will is more than the resultant effect of foreign forces, and it is therefore something inexplicable which supervenes and is added from the outside at a certain point. And, being merely added, it does not and it must not transform the external forces. Hence the special virtue of consent, which on one side makes an assertion of myself, and on the other side still leaves the forces foreign.

within, I cannot fail to experience it and to know in some sense that the process is my act. But up to what point this knowledge and experience will accompany the process, cannot be laid down in general. If, that is to say, you take volition as the complete process in which my idea reaches its end, my awareness is certainly not throughout a necessary accompaniment of my will. My will, we have seen, may even extend beyond my existence.

This being dismissed, we may enter on a more limited inquiry, and may ask first whether and how far my self must enter into the content of the idea. The idea, we have seen, is always the idea of a change in existence, and certainly in some cases it is the idea of myself making this change. I as realising the end am in these cases an object to myself, and it is this idea of myself which here makes the beginning of the process. Now no one can doubt that such an idea is often present in will, and I am not concerned to deny that it is present usually. But I cannot agree that in will the idea does contain my self always, and I do not think that I as making the change must always be an object to myself in the idea.

This question taken by itself has but little importance. On the one hand volition is the identification of my felt self with the idea, and this felt self, we have seen, is so far never an object. And, so far as it becomes an object, the felt self so far is not the self which actually wills. Hence the presence or absence of my self as an element contained in the idea can hardly be vital. On the other hand, in every case after the process has started, my self must perceive itself to some extent as entering into this process, and to some extent therefore my self must in every case become an object to itself.¹ And for this reason again the question whether before the start I am an object to myself, does not seem in itself to be very material. But, since a confusion may give rise to dangerous consequences, the question, I think, must be briefly discussed.

I cannot admit that in all cases my self as changing the existence forms part of the idea's content. At an unreflective level of mind, whether in ourselves or in the lower animals, a suggestion, if it acts at once, need not be so qualified. The perception of another engaged, say, in eating or fighting may produce by suggestion these processes in me. And the result in such a case has on the one hand been certainly willed, but on the other hand the element

¹ This is a point to which I shall return very shortly.

of *my* fighting has not always been contained in the idea. An idea is present because the perception has for me qualified existence incompatibly with itself, and because this incompatible feature, opposed in me to the existing not-self, has then carried itself out. On the other hand the idea is not the idea of the fighting of *another*, for this aspect of otherness drops out before the idea acts in me. And the question is whether the idea, in thus coming to me straight from the perception and in dropping out, as is necessary, some portion of that perception's content, must in part replace that omission by the insertion of my self. I know of no principle from which such a result must in all cases follow, and, as I observe the facts, the result in many cases is absent. The idea of fighting is felt in volition to be *mine*, but it need not contain *me* as an element in the ideal content. Neither the other nor myself need actually appear in that content, though the idea of fighting, freed from otherness, must be in relation with my not-self and must be felt as mine. Then, as the idea realises itself, my felt self becomes in part also perceived, and in the actual process I acquire the experience of *my* fighting. And, if this is so, then in volition the idea is not always the idea of myself making a change.¹

It is difficult to ascertain exactly what in any case is contained in the idea at the commencement of the process. For the process itself necessarily is perceived when begun, and in that experience the idea goes on to qualify itself further. When the idea of the change begins to realise both itself and me, I perceive myself as moving in one with the idea. I am aware of myself altering the existence so as to correspond to the idea, and in this union with the idea I become an object to myself. The idea thus develops and qualifies itself in a continuous process, and on reflexion we may naturally take its acquired character as there from the first. And it is easy in this way to assume that my self as acting is present always in the idea at its start. But though my self is thus present often, and I am ready to admit even usually, my self, we have seen, is not thus present always or

¹ We must be careful not to assume that at an early stage the perception of another's fighting comes to my mind as something belonging to another. The perception will contain something like 'fighting there,' and this, in becoming a suggestion, sheds the 'there,' and in the action is perceived as 'fighting here' or 'me fighting'. At a still lower stage the 'here' and 'there' become even less specified, but, as long as we can speak of will at all, there is an incompatible adjective which is opposed to existence and which in this sense is an idea.

even normally. Nothing is normal and necessary except that the idea of the change should be felt as in one with myself, and then that its actual process should be perceived as my making the change. My self in short, as making the change, is not in fact always preconceived in the idea, and, whether this takes place or not, it is in every case external to the essence of will.

A confusion on this point may threaten danger to our whole doctrine of volition. "Your view," I may be told, "is entirely circular and so illusory. All that you have done is to take the fact of will as an unexplained mass. You then transfer that mass in idea to the beginning of the process, and the process therefore naturally appears as the realisation of this idea. But the idea simply anticipates the actual process in an unexplained form, and you have therefore offered in fact no explanation at all. For it is will, you say in effect, when with will we have the idea of it beforehand." But such an objection need, I think, not cause any serious embarrassment. We do not in the first place admit that my self as acting must in fact be contained in the idea. And, even if we admitted this, the conclusion which would follow really matters very little. For the conclusion which would follow amounts merely to this, that my perception of agency must come before volition in the proper sense of that term. This priority would however make little or no difference to our main result. The idea of a changed existence is suggested, is felt as one with me, and so carries itself out. And this process gives me, as we laid down, the experience of my agency; but the process so far, on the present hypothesis, would not amount in the strict sense to volition. On another occasion however this perception of my agency, which now is acquired, will or may be transferred to the idea as an element in its content. And the result will now follow from an idea which has been qualified as required, and the act will therefore now have become a volition proper. Hence, even if we accept a view which I submit is mistaken in fact, the alleged circle in our account is really non-existent or harmless.

In volition I must have, and must be conscious of, an object not-self, and I must be conscious again of an object idea. With that idea I must feel myself in a special sense to be one, and the idea must be qualified in its content by its relation to the not-self. Then, when the idea realises itself, I perceive myself also as moving in the same sense, and up to a certain point in this movement I am an object to myself. And my self again in many cases, before the

idea has even partly realised itself, is contained as an element in the content of the idea. But at the beginning of the act my self is not always so contained. And after a certain point the process, we have seen, may wholly pass beyond my knowledge and being.¹

Then is the idea of agency, I may be asked, not essential to will? This idea in my opinion is present usually, but I do not think that it is essential, and I even think that in some cases of will it is absent. We always experience the process, when it happens, as our agency, but, before the process happens, agency is not a necessary element in the idea. In other words the idea of an altered not-self, I think, is enough, even if that idea does not contain the feature of an active altering. Let us suppose that at an early stage my self in some point has been expanded into the not-self, and let us suppose that, without experiencing this process as an act, I have perceived it as a change in which my self has flowed over into the not-self. Let us again suppose that later this same change is suggested in idea, and that myself is felt as identified with this ideal change. The process which follows and realises this idea will be experienced as my agency,² and this process, I submit, is also an act of volition. On the other hand the element of agency was not present beforehand in the idea. And if the process, being without such an element in its idea, is denied to be volition, this to myself, I would repeat, matters little or nothing. The process in any case will give at least the perception of agency, and on the next occasion that element, having now been perceived, will tend to qualify the idea.

"But it is the perception of agency," I may probably be told, "which is here really in question. Agency and the experience of it are things one or both of which are ulti-

¹ We may ask whether the idea, *before* it realises itself, need even be the idea of *my* future state. The idea must be felt inwardly as mine, and it must qualify the not-self which comes to me and which so far qualifies me. The idea must thus in its content be the idea of a change in me. But, if you ask whether the idea is that of a change in myself as distinct from others, the question is different. The doubt is whether a change of my not-self, even where my not-self is in felt opposition to an idea felt as mine, must therefore be qualified in the idea as a change of myself as distinct from other persons or things. And I cannot maintain the affirmative here. But, since the idea in its actual process at once goes on to qualify itself, the inquiry, as I have explained in my text, seems to have no importance.

² It will be so experienced, that is, except under certain conditions discussed later in this article.

mate, irreducible and unique, and in this inexplicable fact is contained the real essence of will. To make will consist in the perception or in the idea of this fact is really circular. And once more the perception like the fact is irreducible and ultimate."¹ Now, to confine my reply first to the objection based on the perception of agency, I am not concerned here to deny that such an experience is 'original' and 'ultimate'. Whether anything in our development precedes the practical relation, and, if so, what precedes it, is a matter with which I am not here undertaking to deal. But I maintain that apart from the practical relation there is no will nor any perception of agency, and I insist that in this relation certain elements are essentially involved. And where these are wanting I utterly deny the presence of an experience of agency. On the one hand I do not assert that the elements can exist apart or that they precede the relation, and on the other hand I do not even maintain that with these the whole experience is exhausted. My perceived agency will contain usually, or perhaps even always, some psychical matter which I am not here attempting to detail. But this matter in my opinion most certainly is not essential, though it may give what may be called a specific character to the experience. What is essential is the presence of those several aspects which I have repeatedly described, and, where you have not these, you have not in fact, I contend, the experience of agency. But, in calling these aspects the essential conditions of the experience, I imply no conclusion with regard to their priority in time.

I will pass from this point to consider another mode of objection. "The experience of agency," it may be said, "falls outside your account of it. We might on your account of the matter perhaps perceive a change happening to the not-self, and we might also perceive a change happening to ourselves, but with this we should never get to perceive ourselves as making the change." But for my part I cannot understand how this perception could fail. I feel myself one with the idea of a changed not-self, an idea opposed to the not-self which actually exists. And, as this idea invades the not-self, I feel and I perceive that my self is expanded. The change of the not-self is perceived as my process of expansion, in which both that existence and myself become in fact what ideally I was. We have a change of existence beginning with its idea in myself and itself really ending in

¹ I do not mean to imply that this objection as it stands would be offered all at once by the same person.

that which was ideal. This moving idea is felt in one with myself, and my self thus is felt and is perceived as becoming actually itself. The process is experienced as beginning from within and as going continuously outwards. And surely with this we must in fact have attained to the essence of agency.

There are fundamental difficulties, I admit, which I must here leave untouched. The perception of succession in general, and the qualification in any process of the beginning by the end, offer well-known problems which here it is impossible to discuss. And the same remark holds, we may add, of every kind of predication. But these difficulties do not attach themselves specially to the perception of agency in the self. They apply equally to the experience of any change in outward existence. And these difficulties, if so understood, furnish no ground for objection against our doctrine of will. Such an objection is not grounded unless these ultimate questions are answered in one special manner. It is possible to hold that in the self there is an agency which the self knows in that character, and that this self-conscious agency, while inexplicable itself and the essence of will, serves to explain our perception of process in things, and meets the difficulties which attach themselves to predication in general. I consider any such view to be untenable and to be in conflict with fact, but I cannot undertake the discussion of it here. Whatever plausibility it may possess comes I think from its vagueness and from its inability to realise the conclusions to which its principle would lead.¹ We must not confuse with such a view a doctrine which differs from it vitally. This doctrine is alike in holding agency and will to be itself inexplicable and ultimate, and to be on the other hand the main principle which explains experience. It would however deny that this principle in its working is aware of itself. Or, if aware of itself in any sense, the principle is at least not aware of itself in its own proper character. If the agency in short is a 'fact of experience,' it is nevertheless not experienced in fact as an agency. Such a principle however, it may be urged, is the real essence of volition. Once again it is impossible here to discuss such a doctrine, but such a doctrine may at once be dismissed as here irrelevant. For in these papers, I may remind the reader, I am merely concerned with what we experience as will. If indeed from such a principle you could account for this our actual experience, the case, I

¹ The appearance of Prof. Münsterberg's interesting volume since these words were written has not inclined me to modify them.

admit, would become very different. But for any satisfactory explanation on this head we should seek assuredly in vain. And we are really not concerned here even with 'a fact of experience' except so far as it either itself is an experienced fact or serves as a principle by which experienced facts are explained.¹

It is better to leave an objection which, however fundamental, is far too vague to be discussed briefly, and I therefore will state in a concrete instance the former more definite argument. "I may have a pain," it may be objected, "and the idea of its relief, and I may experience the tension of that idea against existence and may feel myself one with it. Then when the idea is realised I may experience, in and with this change of the not-self, a great expansion of my self. And yet with all this I may gain no perception of agency."² But this is so, I reply, because the conditions are not fulfilled. The process is perceived as beginning from the not-self and as merely happening to me. Either from a general habit or from the presence of some particular cause, the change does not come to me as starting from the idea in me. The realisation of the idea on the contrary appears to begin with an independent movement of the not-self, and the process therefore naturally is viewed as the process of the not-self. I have the idea of relief and yet actually the pain remains. The idea changes in strength and fulness, and generally in the way in which it occupies my self, but on the other hand the pain remains unaltered. There is therefore no acquired tendency to connect actual cessation of the pain with its idea. On the other side not only may the pain have ceased when the idea has been absent, but it may have ceased also when some prominent change of the not-self has been present, and this experience may have happened to me more or less frequently. We have therefore not only the absence of any acquired tendency

¹ I may refer here to MIND, N.S., Nos. 33 and 40. I have noticed for some years an increasing tendency in England to do what I must call to coquet with the doctrine of the "primacy of will". I do not, I trust, undervalue the lesson which is to be learnt perhaps most readily from Schopenhauer. But that lesson, I am sure, is much less than half learnt if we do not realise the difficulties which arise from anything like a whole-hearted acceptance of the doctrine. Prof. Münsterberg's important work should here prove instructive. I hope also that Mr. Schiller's essay, contained in *Personal Idealism* (which I have seen since writing the above), may in its way be useful, though one would seek in it in vain for any serious attempt to realise the meaning and result of that gospel which it preaches.

² Compare the remarks on Expectation, MIND, N.S., No. 44, p. 442.

to connect the change with the idea, but we may have a contrary tendency to view the change as beginning from the not-self. And this order again may be in general the more familiar way of our experienced world.¹ If then, in any particular case of relief from pain, there is nothing to suggest specially that the process has begun from the idea, we naturally fail to experience ourselves as active. And this failure is a consequence which serves to illustrate and to confirm our doctrine.

Let us now suppose on the other hand that the facts are altered. Let us suppose that relief from pain comes habitually when the idea of it is present, or when that idea to a certain extent has inwardly prevailed. And let us suppose that the respective increase and decrease of the idea and of the pain are in general related inversely. Under these conditions we should tend, I submit, to view the relief as ensuing from the idea, and in the process, when it happened, we should gain a perception of our agency. The relief in fact really might arise from another unperceived cause, and our perception of agency would in this case contain an illusion—the same illusion which on one view makes the essence of all experience of will. But, whether illusory or otherwise, the perception, I contend, would arise from these conditions, in the absence, that is, of other conditions which are hostile. If a suggestion is made to me that relief from pain comes from the idea, if this suggestion is not qualified in my mind by anything alien or foreign, but remains with me as a simple connexion of my ideas,² if then in the presence of the pain I have the idea of its relief, and the idea is realised in the actual cessation of the pain—under these conditions I shall experience agency and will. The experience may be illusory, we have seen, but that point is irrelevant, or, so far as relevant, it is not an argument against our view. For we are asking merely

¹ A change ensuing on, and continuously following from, motion of some object not my body, tends in general to be attributed to that object and not to myself. On the other hand the origin of motion in my body, as coming from myself and proceeding outwards, is, I presume, the main source of our experience of agency. The perception of agency in my outward world, I should agree, is transferred, but, though transferred, it may have become a more familiar and natural way of apprehension. I do not however mean by this to imply that our experience of the order of the outward world begins with such a transferred perception of agency.

² This proviso must be emphasised. If there is anything about the idea which makes it other than my idea simply, the act will so far not be experienced as my will. See the preceding article, No. 44.

as to the elements which are essential to our experience of agency.¹

We have so far supposed as one of our conditions a special acquired tendency, a disposition, that is, to join the relief with the idea as following after it in time. But such a particular connexion I think is hardly required. In any particular case a present emphasis may have the same effect as repetition and past conjunction. If, that is, the idea of relief is first opposed to the actual pain and is then realised, and if this experience throughout is prominent and is felt emphatically, we might, even in the absence of an acquired connexion between the relief and the pain, experience the process as our agency and will. I assume of course that there is nothing in the case to suggest the activity of the not-self. But it is not worth while to insist on a point which perhaps bears but little on our general doctrine. The reader will have understood generally that I am not offering an account of our psychical development, or on the other side am attempting an exhaustive analysis of the facts. There are psychical features, I would repeat, in our experience of agency, which, because I think them unessential, have been omitted altogether. And in the development of this experience the changes of my body, felt and later perceived in their felt unity with myself, are obviously a factor of primary importance. But our inquiry here must be limited to points which seem essential to the definition of will.

Before I pass from the subject of our experienced agency

¹ An unbiassed inquiry into the conditions under which we get an experience of activity and passivity is a thing which, so far as my knowledge goes, is sorely wanted. I cannot think it satisfactory that two competent psychologists should in the case of some psychical process be clear, one that the experience of activity is there, and the other that it is not there. I cannot myself approve when I see such a difference end apparently with two assertions. But for myself, even if I were otherwise fitted to undertake this inquiry, it is plain that I could not be regarded as unbiassed. In the main however, and subject to some necessary explanation which is given below in this article, I find that the presence of the experience depends on an idea. If, for instance, my imagination is excited and I perhaps desire to sleep, I can view myself at pleasure as freely active in my imagination, or again as passive and constrained by the activity of a foreign power. And, as I view myself, so also I perceive and I feel myself. Similarly in a carriage or in a train I can regard and can perceive the movement as my act, or again as an alien force that actively sweeps me away either as merely passive or as unwilling. And I can even mix both experiences and can feel that it is at once my act and is also my fate which is taking me in each case to its end. The whole matter, I submit, is one for an unprejudiced inquiry, and I will venture once again not without hope to recommend this conclusion. Cf. *Appearance*, p. 605.

I must direct the attention of the reader to a remaining difficulty. Wherever you experience agency in the proper sense, there you have the experience of volition. Hence, if anywhere you perceived yourself as an agent in the absence of conditions which we have defined as essential to will, such a fact clearly would destroy our definition. Now, if we make no distinction between an awareness of activity and of agency, a contradiction of this kind is likely to arise, and I must therefore offer at once a brief explanation on this point. The question is however too fundamental to be discussed here in an adequate manner.

I will begin by noticing a doubt which may be forthwith dismissed. It might be contended that for an experience of activity and passivity it is not necessary to be aware of an other or not-self. But, when the not-self is understood so as to include my existence, so far as that existence is opposed to my idea, an objection of this kind at once loses plausibility.¹ We may therefore, leaving this, return at once to the more serious difficulty. If there is no difference in my experience between activity and agency proper, and if my experience of activity is possible without the presence of an idea of change, then it will not be true that an idea is essential to volition. And I will now proceed to draw out and to explain this objection. "Even when idea is understood," it may be urged, "as you have understood it,"² I may perceive myself as active where no such idea can be found, or at least where no such idea carries itself out in existence. For I may perceive my self as it expands against and into the not-self, or again as it is contracted when the not-self advances into me. And this expansion or contraction may be experienced as my activity or passivity, without the presence in either case of any idea which realises itself. If my self is written as AB and the not-self as CD, we may perhaps at first write their experienced relation as AB | CD.³ Let us now suppose

¹ On this point see above, p. 150.

² MIND, N.S., No. 40, p. 5, and No. 44, pp. 460-462.

³ These symbols of course are miserably inadequate and may even mislead. I however offer them to the reader who is prepared to make the best of them. The vertical line which divides these groups of letters is of course not to be understood as distinguishing in the ordinary sense "subject" from "object". The division holds merely within the content which is experienced in my whole self, and it is meant to distinguish those features in the object-world which oppose and limit me, from the rest of my world, whether object or not, with which in feeling I am one. If we suppose a part of my body which for the moment is out of gear, and so prevents my ordinary feeling and perception of self, and if we then suppose that this restriction of myself

that this experience is changed to $ABC \mid D$, and that the process of this change, of myself from AB to ABC and of the not-self from CD to D , is perceived by me. And let us suppose also that there is no suggestion of this change having arisen from the not-self. In this case I become aware of myself as changing outwards from a narrower to a wider self, a self that has become more than what it was, and has become this at the expense of the not-self. The process into the not-self, if so, is referred to myself as a further quality; and experienced pleasure, though not essential, would contribute to my so taking it. There is here on the one side no foregoing idea which carries itself out, but on the other side there arises a perception of myself as active. So in the same manner my experience may change from $AB \mid CD$ to $A \mid BCD$, this change being perceived as the invasion of me by the not-self. And here once again there will be no idea which realises itself in the result. Hence without any such idea we have the perception both of passivity and of activity, and it therefore is false that without an idea there is no experienced agency or will."

I can identify myself largely with this objection but I cannot endorse it altogether. I do not think that in the absence of an idea I could possibly attain to the experience of agency. I should not under the described conditions either perceive myself as doing something or as having something done to myself. But if activity and passivity are used in a lower sense which stops short of agency, then under the above conditions I might be aware of myself as active or passive. And I should not myself object to the use of activity and of passivity in such a lower sense, at least so long as confusion is avoided. My perceived self-expandedness in what before was the not-self may thus, unless for some further reason the process is taken as beginning from the not-self, be regarded as the perception of my activity. And on the other side my self-contractedness, when my self is seen to become in part the not-self, may be an awareness of passivity; so long, that is, as the result is not made to appear as beginning from my self. And in neither case will such an experience involve an idea, an idea, I mean, which carries itself out in the result. But such a lower activity, whether on the side of my self or of the not-self, must be clearly understood not to amount to agency. It is not agency at all, that is, so long as it remains

is removed, such an example may perhaps explain the general sense of our symbols. Unfortunately with the restriction and enlargement there goes also a qualitative change.

simply in its own character. On the other hand it tends naturally to pass beyond itself and to become the experience of agency by a process of construction. And, since this tendency serves to obscure the distinction, I will ask the reader to pause and to consider its nature. The subject of the experience has perceived in fact merely his own expansion into the not-self, or on the other hand the inroad of the not-self into his being. The process so far begins from one side of the relation, and in that character is regarded as belonging to that side. And with so much, I would repeat, we have not the perception of agency, since the process is not viewed as coming out of that which in its result it qualifies. But it is natural for the subject himself, or again for an outside observer, to make the addition wanted to produce the perception of agency. The result is transferred in idea from the end to the beginning, and qualifies that beginning as an element which lay within it and issues from it. And with this we now have agency and will in that character which our definition has ascribed to it. The above construction may be erroneous and may more or less misinterpret the facts, but at least in the subject of the experience it may develop itself into an actual perception. What was first perceived was in fact no more than a self-expandedness, and it is the presence of the idea by which it has now become a perceived self-realisation and agency.

It may be instructive to dwell for a time on the above sense of activity and passivity, a sense in which as yet they do not imply agency and will. We must distinguish this again from feelings which, whether in idea or in actual time, are anterior to perception, and which in any case do not pass beyond their own lower level. These feelings of activity and of passivity of course exist at all stages of our development, and in some sense each, I should say, precedes its respective perception. But neither is in itself an experience of passivity or activity, if this means that, confined to them, we could be said to have any knowledge of either. Our first perception of activity or passivity goes beyond and is distinct from such feelings. It gives us the knowledge of something in the character of being active or passive, though this something is not yet qualified on either side by agency. I perceive myself first as passive when a change in myself is referred to the not-self as its process, when, that is, I become different and the object not-self becomes different, and the alteration is perceived as the increase of the not-self in me. This experience does not imply so far my practical relation to the object in the sense of my striving against its invasion.

And again it does not imply agency on the part of the object. That agency and my struggle, I repeat, may perhaps in fact exist, but they are not contained so far as such within my experience. And I have feelings and those feelings may more or less qualify the not-self, but, once more, not so as to produce a perception of agency. We may find an illustration in my state as theoretical or perceptive. Where knowledge develops itself in me without effort or friction, my experience even here is very far from being simple. But my attitude, so far as I tranquilly receive the object's development, and so far again as that development is not viewed as its agency, is an example of what we mean by simple passivity.¹

And we have a perception of activity which remains on the same level. In this, as we saw, I perceive my self to be enlarged at the expense of the not-self. But whatever feeling may accompany and may qualify this process, I do not perceive the not-self as striving or myself upon the other side as doing something to this not-self. Thus, in my theoretic attitude again, the unknown existence is beyond me as a not-self, and my knowledge of it can come to me as an expansion of myself at its cost. And yet my attitude so far involves no experience of resistance or of agency. We found another instance in what I may perceive on relief from a pain, although the cessation of the pain is not viewed as my doing. And we saw that activity and passivity in this lower sense are turned by a small addition into that which implies agency and will.² This addition in each case consists in an idea of the result, an idea which going before carries itself out in the process.

These subtleties, however wearisome, cannot I think be safely neglected. We have often what may be called an

¹ I refer to that state of mind in which the object comes to me as something which *is*, without my feeling at the time that it is *doing* anything to me, or I to it or again to myself.

² If we imagine a dog beginning to run, we may suppose that with this he gets at once a perception of activity (*Cf. Appearance*, p. 606). His experience however at first need not amount to agency proper. But the perceived expansion of self into the not-self will tend naturally to become an idea, and that idea of the result will tend to precede and to qualify beforehand the process. And, with such a self-developing idea of a changed not-self, the dog would have forthwith the experience of agency. The same ideal construction can of course be also made from the outside by a spectator, and can then be attributed, perhaps falsely, to the actual subject of the process. In the passage of my book to which I have just referred I have not distinguished between the two senses of activity referred to above.

awareness at once of both activity and passivity; but to take the two always here in the same sense and as exactly correlative might involve us in confusion and in serious difficulty. The practical attitude, we saw, involves in itself the attitude of theory, and without the perception of an object no will is possible. Now as receptive of such a not-self I have a sense of passivity, and we may regard this sense as in some degree present in will. But in will to take this perceived passivity together with our perceived agency as at one and the same level of meaning, would not be defensible. It would be a mistake which might lead us to dangerous results.

Before I pass from this subject I must return to a final difficulty. "It is impossible," I may be told, "anywhere to understand activity in a lower sense, for activity and passivity are inseparable from agency both in fact and in idea. The distinction of self from not-self depends on the full practical relation, and apart from this relation there is neither in idea nor in time the possibility of an experience of anything lower." This is an objection which obviously goes too far to be discussed in these pages, but I can at once make a reply which I consider to be here sufficient. The reader is at liberty to assume here for the sake of argument that our experienced distinction of self from not-self comes into existence with and in the experience of agency and will. I could not myself admit that before this distinction there is no experience at all. But for the sake of argument I will admit that the practical relation, with its experience of agency, is the beginning of that consciousness which distinguishes not-self from self. Such an admission, I would however add, agrees perfectly with our doctrine. The practical relation still maintains that character on which we have insisted, and it involves always the self-realising idea of a change. On the other hand we find in fact a lower perception of activity and passivity, just as in fact we still must find our theoretical experience and attitude. And such a consequence need entail no confusion or discrepancy. The practical relation, together with experienced agency, will be there from the first, and will remain the condition of our experience of any relation between self and not-self. But lower experiences of that relation may none the less actually be present. They will be present either as degraded forms of the practical relation, where one or more of its aspects have vanished in fact; or they will exist within the practical relation as dependent and subordinate features of that inclusive whole. In the latter case they will be abstractions on

which our attention and our one-sided emphasis bestows the appearance of a separate existence. But this is a point with which for our present purpose we are not further concerned. And when this reply, together with what precedes it, is fairly considered, the objection to the use of activity in a lower sense may, I hope, be removed. And it will be impossible from this ground to argue against the presence of a self-realising idea in our experience of agency.

I will end our inquiry into this difficult point by reminding the reader that in one sense I attach to it no great value. We have, I think, a natural tendency to make use of activity and of passivity in cases where the experience of agency is absent. And for myself I am ready to permit within limits and to justify this use, but on the other side I am also ready to condemn and to disallow it. But in the latter case, if we may not distinguish between activity and agency, we must at least distinguish both from a lower experience. There will be an experience, such as we have described, which falls short of agency, and which, if it is not to be called active and passive, must at least in some way be recognised. This lower experience, if left unrecognised in fact, becomes a dangerous source of confusion and mistake; but on the other hand the name which we are to apply to it is a matter of secondary concern.

We have now discussed the sense in which the self in will is identified with an idea, and in connexion with this have inquired into our experience of activity and agency, and we have asked how far these two should be regarded as distinct. Our space has been too short for a satisfactory treatment of such problems, even if otherwise such a treatment were within my power. There remain various questions with regard to the practical relation and its opposition of the not-self to the idea and to the self. I can however do no more here than notice some points in passing. (i.) In the first place this opposition is, I should say, in no case motionless and fixed. The idea, if it does not at once realise itself, will ebb and flow, and, as against the not-self, will at its boundary more or less waver. There will be a constant movement, however slight, of passing forward into fact and of again falling back. (ii.) The opposition of the not-self may again be so transitory and so weak that it fails to give us in the proper sense an awareness of resistance. The existence to be changed by the idea may be more or less isolated. It may find little support in any connexions with the self and the world, and its strength may be said to con-

sist in its own psychical inertia.¹ And the extent of the existence and the inertia may be inconsiderable. In other words the resistance to some special change may be no more than a resistance to change in general. But this resistance, it is clear, may in some cases amount to very little. (iii.) We may have in volition a forecast and an expectation of the result, and this may be strong and may be definite in various degrees. And in some cases its strength and detail may tend to overpower the actual fact. The idea may, before the act, so prevail against the perceived existence as in part to suppress my experience of activity against an opposing not-self. I do not mean that this experience can in will be wholly suppressed, but it may be reduced in some cases to an amount which is hardly noticeable. In brief within the act of volition our experience is both complex and variable, and to try to enter on these variations would be a lengthy task. But everywhere the main essence of volition remains one and the same, and that essence, I venture to think, has been described by us correctly.

In the next article I shall discuss the alleged plurality of typical volitions, and shall briefly deal with errors which prevail on the subject of aversion. Then, after disposing of some minor points, I shall finally inquire how and by what means the idea comes to realise itself in fact.

¹ I shall return to the subject of inertia in my next article.

II.—RECENT WORK ON THE PHILOSOPHY OF LEIBNIZ.¹

BY B. RUSSELL.

THE philosophy of Leibniz, his merits and demerits, and his place in the history of thought, have been hitherto universally and completely misunderstood. This is to be accounted for partly by his sheer intellectual greatness, partly by the ignorance of editors, partly by his lack of leisure to compose a *magnum opus*, and partly also (it must be confessed) by his utter lack of moral elevation. This last cause led him to publish by preference his worst writings, to ruin the consistency of his system for the sake of orthodoxy, and to mislead the world (after his unsuccessful experiment with Arnauld) as to the grounds of his metaphysical tenets. Among the papers which he left unpublished, there is contained much that has a far higher value than any philosophical treatise that he permitted the world to see. But here the editors become to blame. M. Couturat shows that a whole mine of the most valuable material has been left untouched by Erdmann and Gerhardt, and that many opinions and methods, which had been known only in isolated fragments, belong really to systematic and life-long attacks on fundamental problems. No man more often or more gloriously than Leibniz missed a unit by aiming at a million. And if he failed to compose a *magnum opus*, M. Couturat shows that this was due to the vastness of the enterprise that he undertook—an enterprise surpassing the powers of a single man, but never assisted, in spite of urgent appeals, by any of his contemporaries. His philosophical successors, too, have smiled at his projects, until at last the mathematicians, if not completely, yet in a very large measure, have unwittingly realised them.

For the true understanding of Leibniz, M. Couturat's work is of the very first importance. It is based upon an extensive study

¹ *La Logique de Leibniz d'après des documents inédits.* Par Louis Couturat, chargé de cours à l'université de Toulouse. Paris: Alcan, 1901. Pp. xiv., 608. *Leibniz' system in seinen wissenschaftlichen Grundlagen*, von Dr. E. Cassirer. Marburg: N. G. Elwertsche Verlagsbuchhandlung, 1902. Pp. xiv., 548.

of unpublished manuscripts, to which was brought, what is absolutely essential, a wide and thorough knowledge of modern mathematics—Symbolic Logic, Arithmetic and Geometry. Without such knowledge, it is impossible to appreciate the merit of attempts which have not succeeded, to know why they failed, or to realise that success was possible and of the highest moment. Three objects are served by M. Couturat's work. The first, which he mentions as the chief, is to show that "Leibniz's metaphysic rests solely upon the principles of his Logic, and proceeds entirely from them" (p. x.). The second is to set forth precisely what his Logic was, and the third is to show its connexion with the various projects of a universal characteristic, a universal language, a universal mathematics, etc., which Leibniz cherished throughout his life. In all three objects, as it seems to me, although some of the principal conclusions absolutely contradict received opinions, the work is completely successful. Perhaps the most revolutionary conclusion in the whole book is, that the principle of reason, for all its trappings of teleology and Divine goodness, means no more than that, in every true proposition, the predicate is contained in the subject, *i.e.*, that all truths are analytic (p. x.). In face of the evidence adduced, this conclusion, startling as it is, appears to be quite irrefutable.¹

The work is divided into nine chapters, dealing respectively with Syllogistic, the Ars Combinatoria, the Universal Language, the Universal Characteristic, the Encyclopædia, the Scientia Generalis, the Universal Mathematics, the Logical Calculus, and the Geometrical Calculus. All these projects are shown to be interconnected, and to spring from a common logical root. Some have been proved by time to be chimerical, while others—notably the three last—are now actually constituted, two of them very much as Leibniz endeavoured to constitute them. The common logical source of his doctrines consists, as M. Couturat points out, of two postulates: (1) All ideas are compounded of a very small number of simple ones, forming the *Alphabet of human thoughts*; (2) complex ideas proceed from these simple ones by a uniform and symmetrical method of combination analogous to arithmetical multiplication (p. 431). Both these postulates are of course false; but while in some regions their falsity is disastrous, in others it is only unfortunate. Two other errors, less fundamental, but perpetually recurring, are pointed out by M. Couturat, and are attributed by him (p. 438) to an almost unconscious respect for Aristotle. The first of these, which was only a defect of method, consisted in a preference for taking syllogisms in intension rather than extension; the second, which rendered Leibniz's attempts to found the logical calculus abortive, was the failure to realise the fallacy in such moods as Darapti and in the scholastic doctrine of

¹ In my *Philosophy of Leibniz*, chap. iii., I gave a different interpretation, which M. Couturat's work has persuaded me to abandon.

conversion and subalternation, which results from wrongly assigning existential import to universal terms (pp. 32, 348 ff.). These errors are already set forth in the first chapter, together with certain technical improvements which Leibniz suggested in the treatment of syllogisms.

The second chapter deals with the *De Arte Combinatoria*, which Leibniz published at the age of twenty. The art suggested consists in analysing all concepts by reducing them to simpler concepts, until at last we reach certain simple indefinable concepts: these will be the terms of the first order. Every composite term will then be represented by the symbolic product of its constituent simple terms, which will constitute its definition. The predicates of a term are its factors, and the subjects of which it can be affirmed are its multiples. Here already, as M. Couturat remarks (pp. 48-49), we find Leibniz's leading ideas.

The third chapter points out that the characteristic was at first conceived by Leibniz as a universal language, not as an Algebra. This language was to be simple, because it was to be based on a logical foundation, *i.e.* on a complete analysis of concepts: for every simple concept there was to be a symbol. When he first hoped for an Algebra of thought, he identified this with his universal language. This was his view in 1676; but four years later he distinguishes his language from every kind of Calculus (pp. 61, 78). He had a device by which the syllables of a word could be permuted without change of meaning; this, he says (p. 63), would give great facility for verse or music, enabling very beautiful songs and poems to be composed by an infallible and quasi-demonstrative method! For the purpose of his universal language, he undertook a grammatical analysis. He rightly decided that inflexions are to be avoided as far as possible, and that the philosophic language should be analytic. Nouns, he says, express ideas, while verbs express propositions, and particles (though this is not so clearly said) express relations (pp. 69, 71, 72). Besides adjectives and particles, he says, we require only one noun, *ens*, and one verb, *est*. He has great difficulty in the treatment of the genitive, and in other forms involving relations not reducible to predication. In all his grammatical analysis, he has a logical purpose, namely the justification of the asylogistic inferences which he had learnt to study from Jungius. Two types of these occupied him, namely the inversion of relations (David was the father of Solomon, therefore Solomon was the son of David), and inferences from the direct to the oblique, such as: A horse is an animal, therefore the head of a horse is the head of an animal (this is not Leibniz's instance, but, I think, Jevons's). His grammatical analysis, as M. Couturat remarks (p. 437), gave him the materials for a logic of relations; but out of respect for scholastic tradition, he regarded these materials as *merely* grammatical, and made no logical use of them. Thus he was unable to symbolise the above two types of inference, of

which, we may observe, the true statement is the following: (1) If x has to y the relation R , y has to x the converse relation; (2) if all a is b , every term having the relation R to an a has this relation to a b . Leibniz's grammatical studies suggest the reflexion, recommended also by many more general considerations, that philosophical theories of Logic have far too much neglected grammar, and that the endeavour to represent actual sentences in accordance with received doctrine would long ago have revealed the importance of many neglected points. Leibniz appears to me to be right in holding that the verb conceals the inmost essence of the proposition, and even of truth itself; but the necessity for particles in his language ought to have shown him the falsity of the subject-predicate logic. Philosophical grammar appears to be a subject of the highest importance; but, like all other subjects, it has been most shamefully neglected.

The construction of a universal language, we saw, was to be based upon the "Alphabet of human thoughts"; but this required an analysis of all concepts and an inventory of human knowledge. The latter was to be the *Encyclopædia*; the former would give the materials for the universal characteristic. These two projects thus developed out of the attempt to construct a truly philosophic language (p. 79); and neither could be carried far without the other, since the characteristic requires the reduction of all scientific notions to a logical system, which is the work of the *Encyclopædia*, while this in turn presupposes a determination of the order of scientific truths, which depends upon the characteristic. For this reason, both must be developed and perfected together (p. 80).

Chapter iv. explains what the characteristic was to be. It was to consist of a collection of signs which not merely represented ideas, but were to be positive aids to reasoning, like the symbols of Arithmetic and Algebra. Indeed, the characteristic was actually to replace the necessity of reasoning by rules for the manipulation of signs (p. 101). Leibniz attached so much importance to the invention of proper symbols that he attributed to this alone the whole of his discoveries in mathematics (pp. 83-4). In this high estimate of symbolism, those who have profited by modern Symbolic Logic will be inclined to agree with him; while the bulk of the learned world will probably continue to agree with Tschirnhaus, who wrote that he saw no utility in the invention of the Infinitesimal Calculus, and that the introduction of new notations made the sciences difficult (p. 86). The Characteristic was to apply to all strict reasoning, and was to be especially useful in philosophy, where (as Leibniz most justly observes) rigour is more essential than in geometry, because errors are less easily detected (p. 93, note). Leibniz allowed several parallel symbolisms for his logic—arithmetical, algebraical, geometrical, and even mechanical—for all rational sciences must "symbolise" with each other (p. 116). This rather difficult expression means, I fancy, that, by

giving different meanings to the symbols, a given symbolic proposition may be interpreted as a true proposition in any one of these sciences—a procedure of which there are innumerable instances in mathematics.

The most ambitious and the most chimerical of Leibniz's schemes was the Encyclopædia. This was to contain the whole body of human knowledge, historical and scientific, arranged in a logical order, and following a demonstrative method. It was to begin with simple and primitive terms, and Euclid's Elements were to be its model; finally, a small number of principles would suffice for the foundation, and thus the sciences would be abridged as they grew (p. 152). This task, even Leibniz had to admit, surpassed the powers of a single man, and for its fulfilment he wished to found an "Imperial German Society"; all his plans for the foundation of Academies are connected with the Encyclopædia (p. 127 and Appendix iv). Originally, theology and law occupied the place of honour in the Encyclopædia; but after 1679 logic was to be immediately succeeded by mathematics and physics (p. 129). Two causes, we are told (p. 175), prevented the accomplishment of the work—the lack of time, and the failure to find collaborators. Surely we may add the inherent impossibility of the task; for here Leibniz's panlogism, his belief in the possibility of deducing everything *a priori* from a small number of premisses, led him to conceive all truth as an ordered chain of deduction in a sense which is essentially false. In Pure Mathematics, where alone this ideal is applicable, the task which he attempted has been at last accomplished; but elsewhere, premisses which are essentially empirical—i.e. concerned with existence at particular times—appear to be logically and ultimately essential.

The Encyclopædia required what Leibniz called *Scientia Generalis*, i.e. a general method applicable to all the sciences; this was, in fact, the whole of his *Logie* (p. 176). M. Couturat studies it fully in a long chapter (chap. vi.).

Leibniz makes two divisions in the art of reasoning. We may reason, he says, from principles to consequences, from causes to effects; or again, we may go from given consequences to the principles required, from known effects to unknown causes (p. 177). The other division is into the logic of certainties and the logic of probabilities (p. 239). Both these divisions seem objectionable. If a principle can be inferred from a consequence, it must follow from the consequence, and is therefore a consequence of the consequence. As for causes and effects, it is of course possible, speaking generally, to argue either from effects to causes or from causes to effects, and this seemed relevant to Leibniz because he regarded causes as *logically* prior to effects (p. 222). But when it is recognised that cause and effect are on the same logical level, this twofold direction of temporal implications ceases to have a fundamental logical importance. As for probability, it is, Leibniz says, the logic of the real; if we could calculate the

probability of all the events that are possible in a certain contingency, the one which is most probable would certainly happen (p. 239). This view seems to rest upon a false theory of probability, but I cannot discover precisely what theory, or whether any definite theory at all. It seems certain, however, that the most probable of a number of events is never certain unless all the others are impossible. The whole theory of probability appears to belong to a world apart, having nowhere any contact with the world of certainty; and this is fortunate, for the logical analysis of probability, so far as I have been able to discover, is as yet wholly unaccomplished.

Leaving this twofold division, let us examine the rest of Leibniz's general science. The analysis either of ideas or of truths, he says, may be infinite; but the foundation of all truths is the same, namely that the predicate is contained in the subject (pp. 184, 208 ff.). Consequently there are no indemonstrable axioms except the law of identity or contradiction, though for the present it is necessary to accept some axioms without proof. Axioms are proved *by means* of definitions, but their truth rests on the law of identity, not on definitions. Definitions are not arbitrary, as Hobbes maintained, for their objects must be shown to be *possible*, i.e., not contradictory. The best way of proving this is to analyse a notion completely, for all simple notions are compatible *inter se*. Here Leibniz was faced by an insuperable difficulty, which was one great source of error in his philosophy. We saw that he believed all synthesis of simple concepts into complex ones to be of a single type, the type which is now called logical multiplication. Hence he was unable to explain how simple ideas, all compatible *inter se*, could generate incompatible complexes (p. 432). He remarks himself (*Gerh.* vii., 195): "It is yet unknown to men what is the reason of the impossibility of different things, or how it is that different essences can be opposed to each other, seeing that all purely positive terms seem to be compatible". The fact is, that the notion "not-*a*" is formed by a synthesis of quite a different kind from logical multiplication: there is not a class of *nots* and a class of *a*'s whose common part is "not-*a*". Thus incompatibility is only explicable by admitting a synthesis which is not that of two predicates, such as the analytic theory of judgment requires; and yet, until we have such negative predicates as "not-*a*," there is no possibility of contradiction, and therefore no field for the application of the analytic criterion of truth. And when this one new form of synthesis has been admitted, it becomes easy to see that there are others, of which the chief are logical addition and relative multiplication.¹ Thus a more careful consideration of negative terms and of the conditions of incompatibility would have sufficed to show Leibniz the falsity

¹ Relative multiplication is the kind of synthesis which, from two relations of father to son, obtains a relation of grandfather to grandson.

of the analytic theory of truth and of the whole subject-predicate logic.

That Leibniz held *all* truths, not only the necessary ones, to be analytic, is proved by many passages which M. Couturat quotes (see p. 208 ff.). This principle, that the predicate is always contained in the subject, is held to be the foundation of Leibniz's metaphysic (p. 209, note)—a thesis which is amply demonstrated in a separate article.¹ Every truth is either formally or virtually identical, and consequently has its *a priori* proof; but in the case of truths of fact, this proof requires an infinite analysis, which God alone can accomplish. Contingent truths, as Leibniz is fond of remarking, resemble incommensurables; the exact point of resemblance is that both involve an infinite series. The view that propositions which are analytic may not be necessary is strangely paradoxical, and brings out with startling clearness the hopeless inconsequence involved in Leibniz's doctrine of contingency, with its tiresome progeny of final causes, liberty, and optimism. Nevertheless the following passage, quoted by M. Couturat from an unpublished MS. (RMM, p. 11, note), leaves it beyond doubt that the above was really his view: "*Ita arcanum aliquod a me evolutum puto, quod me diu perplexum habuit, non intelligentem, quomodo praedicatum subjecto inesse posset, nec tamen propositio fieret necessaria. Sed cognitio rerum geometricarum atque analysis infinitorum hanc mihi lucem accendere, ut intelligerem, etiam notiones in infinitum resolutibiles esse.*"² The view which Leibniz held in youth, namely that the number of simple concepts is finite, and that there is only one kind of synthesis of concepts, involves the consequence that the total number of concepts is finite. For, owing to the law of tautology, nothing is gained by the repetition of a concept in a complex in which it already occurs; hence if n be the number of simple concepts, $2^n - 1$ will be the total number of concepts, both simple and complex. This consideration alone should have led Leibniz to reflect either that there is more than one kind of synthesis, or that the number of

¹ "Sur la métaphysique de Leibniz (avec un opuscule inédit)," *Revue de Métaphysique et de Morale*, January, 1902. I shall refer to this article in future as RMM.

² The view that infinite complexity is the defining property of the contingent has the curious consequence that truths about possible substances are contingent. For any substance that might have existed in a possible world (since all possible worlds involve time) would have had the same infinite complexity as actual substances have. I imagine Leibniz would have replied that individual substances—as opposed to generic and specific notions—are known to us only by experience, which requires actual existence; what *we* can know *a priori* never has infinite complexity, and hence we cannot have the notion of any one particular possible substance in a possible world, unless this substance actually exists. The infinite complexity required for particularising a substance exists confusedly in perception, but does not exist at all in our knowledge of possible non-existent substances.

simple concepts is infinite. One or other of these (both of which are true) is involved in the possibility of infinite complexity. I do not know whether Leibniz perceived this, nor, if he did, which of the two he adopted. It is certain that the doctrine of the infinite complexity of contingents belongs to his mature philosophy rather than to his earlier attempts; and M. Couturat's chapter on the Logical Calculus seems to show that his views on the kinds of synthesis did not change sufficiently to allow of infinite complexity resulting from a finite number of concepts. If, then, Leibniz perceived this difficulty at all, he must have abandoned the view—which seems to have been rather an unconscious prejudice than a definite opinion—that the number of simple concepts is finite.

The principle that all truths are analytic is Leibniz's "principle of reason". This principle is first stated in 1670, in the "*Theoria Motus Abstracti*"; it is not, M. Couturat says, a consequence of the law of contradiction, but its complement, for while the one affirms that every identical proposition is true, the other affirms that every true proposition is analytic, *i.e.*, virtually identical (pp. 214-215). The mutual independence of these two principles—which seems to be true in fact, and is suggested, though not explicitly stated, in Leibniz's language—has a very curious consequence, not pointed out by M. Couturat. If the principle of reason does not follow from the law of contradiction, it cannot, according to Leibniz's logic, be itself analytic, and is therefore an instance of its own falsity. This proves that, unless we can deduce from the law of contradiction itself that all truths are analytic, there must be at least one truth which is synthetic. The principle of reason, therefore, is either false or a mere consequence of the law of contradiction—an alternative which *we* can have no hesitation in deciding.¹

Leibniz speaks sometimes as though the principle of reason were only applicable to contingents. This, M. Couturat rightly remarks, is due to the fact that elsewhere, though applicable, it is not required for demonstration (p. 216). Its universality results from Leibniz's dictum: "We may say, in some sort, that these two principles are contained in the definition of the true and the false" (p. 217). The contingency of all temporal existents results from the definition by infinite complexity through the principle that the cause is the ground of the effect, whence an infinite analysis is required for the *a priori* proof of temporal propositions (p. 222). The use of the principle of reason in deducing the nature of what actually exists is interesting, but very confused. M. Couturat proves from an unpublished MS. that already in December 1676 Leibniz held that not all possibles exist (p. 219, note)—a fact

¹ M. Couturat tells me that he regards as analytic every proposition which follows from the principles of logic, of which the law of contradiction is only one. I do not know whether he attributes this position, which solves the above difficulty as well as many others, to Leibniz.

which, as is justly observed (RMM, p. 12, note), suffices to prove that Spinoza had no durable influence upon him, at least as regards fundamentals. The question therefore arises why some things exist rather than others. The reply, to which, in published works, Leibniz always gave a theological turn, was that that world is actual in which there is the greatest metaphysical perfection, *i.e.*, in which the greatest quantity of essence exists. The conflict of possibles, he says, results in the greatest number of compossibles (*Gerh.*, vii., 194). This is the "divine mathematics" or "metaphysical mechanism" of which we hear so much (p. 227). Leibniz's optimism was logico-mathematical: perfection was merely a quantitative maximum.¹ But the question for us is: How does this view follow from the principle of reason? The answer to this question turns on the theory of existence. On this theory, he makes two classes of remarks, which both he and M. Couturat appear to regard as mutually consistent, but which seem to me radically opposed to each other. On the one hand, we are told that existence is a perfection, and that there is something more in the concept of what exists than in that of what does not exist, whence our author concludes (RMM, p. 13) that existence, like any other predicate, is contained in subjects of which it can be truly affirmed. But again Leibniz says: "If existence were anything other than the exigence of essence, it would follow that itself would have a certain essence, or would add something new to things, concerning which it might again be asked, whether this essence exists, and why this rather than another" (*Gerh.*, vii., 195, note). This passage sounds like a refutation of the others; nevertheless it is not so regarded by Leibniz, for he says: "Existencia a nobis concipitur tanquam res nihil habens cum Essentia commune, quod tamen fieri nequit, quia oportet plus inesse in conceptu Existentis quam non existentis, seu existentiam esse perfectionem; cum revera nihil aliud sit explicabile in existentia, quam perfectissimam seriem rerum ingredi" (RMM, p. 13, note). The end of this very instructive passage seems to imply that existence *means* belonging to the best possible world; thus Leibniz's optimism would reduce itself to saying that *actual* is an abbreviation which it is sometimes convenient to substitute for *best possible*. If these are the consolations of philosophy, it is no wonder that philosophers cannot endure the toothache patiently! The whole theory is so radically vitiated by the analytic theory of judgment that it seems impossible to state it at all clearly.² But the use of the principle of sufficient

¹ P. 231. M. Couturat adds: "or minimum"; but metaphysical perfection in itself is always a maximum, though in some mathematical problems—*e.g.*, the principle of least action—a minimum appears as an alternative.

² M. Couturat's work has led me to abandon the theory that Leibniz held existential propositions to be synthetic—with regret, since the theory he did hold appears to me very inferior to the one which I imputed to him in my *Philosophy of Leibniz*. It is clear, at any rate, that Leibniz

reason is quite plain from the discussion in *Gerh.*, vii., p. 194, where it is laid down that "the first truth of fact, from which all experiences can be proved *a priori*, is this, namely: *Everything possible demands that it should exist*". And this principle is proved by observing that, unless there were some inclination to exist involved in essence itself, nothing would exist, since no reason can be given why some essences should demand existence rather than others. Thus essences range themselves in the conflict on the side of those with which they are compossible, and a tug of war results, in which the majority are victorious. An interesting conflict of ghosts all hoping to become real! But it is hard to see what God has to do in that *galère*.

Sciences dealing with actual existents, as appears from the above theory, were for Leibniz just as *a priori* as other sciences. Immediate internal experiences are first truths for us, but not absolutely; experience is only confused reason (pp. 256, 259). Induction, as understood by empiricists, is absolutely condemned by Leibniz, as insufficient and even misleading (p. 261). Deduction is for him the only method, and abstract mathematics is the true logic of the natural sciences (p. 271). These views are not in harmony with those of most modern logicians, but I cannot help thinking, with M. Couturat (p. 271 note), that there is no valid inference which is not deduction, and that induction, in so far as it is not disguised deduction, is merely a method of making more or less plausible guesses. Where Leibniz erred was, not in insisting that deduction is the only method of inference, but in failing to realise that the number of independent premisses, obtainable only, if at all, by immediate inspection, instead of being two, is strictly infinite.

Chapter vii. deals with Universal Mathematics—a subject which appears to be precisely identical with what Mr. Whitehead has called Universal Algebra. Although M. Couturat deals with this subject in a different chapter from that devoted to the Logical Calculus, he does not clearly state, any more than Leibniz does,

regarded "truths of fact" as analytic in 1686, when his system was new and he had not yet forgotten his reasons for it. In later years, however, expressions occur which are difficult to reconcile with this view, such as: "Truths of fact are contingent and their opposite is possible" (1714; *Gerh.*, vi., 612); "A truth is necessary when the opposite implies contradiction; and when it is not necessary, it is called contingent" (1707; *Gerh.*, iii., 400); "when any one has chosen in one way, it would not imply a contradiction if he had chosen otherwise" (1711; *Gerh.*, ii., 423). Such passages can only be reconciled with M. Couturat's view by the distinction between explicitly and implicitly analytic propositions; where an infinite analysis, which only God can perform, is required to exhibit the contradiction, the opposite will *seem* to be not contradictory. The only other escape I can imagine, which appears to be that favoured by M. Couturat, would be to suggest that the denial of an analytic truth might be not self-contradictory; this mode of escape, however, would not, I think, commend itself to Leibniz.

the exact difference between the two. The fact is that the *Ars Combinatoria*, or Universal Mathematics, is more formal than the Logical Calculus: it is concerned with deductions from the assumption of a synthesis obeying such and such laws, but otherwise undefined. We may say that, in this subject, our signs of operation, our $+$ and \times and whatever other such signs we may employ, are themselves variables, subject merely to hypotheses as to their formal laws; whereas in every other branch of mathematics, and in the Logical Calculus itself, only the letters are variable, and the signs of operation have constant meanings. It might seem, from this account, as though Universal Mathematics were the most general of all mathematical subjects, and in a sense this is true. But it is emphatically not the logically first of such subjects, for itself employs deduction and the logical kinds of synthesis, which are explicitly dealt with in the Logical Calculus. Moreover, in order that any deductions from an assumed formal type of synthesis may have importance, it is necessary that there should be at least one synthesis of the type in question; and this can never be proved by the *Ars Combinatoria* itself. This science, therefore, is logically subsequent to the Logical Calculus. The matter may be stated thus: In every proposition, when fully stated, there must be constants, *i.e.* terms whose meaning is not in any degree indeterminate. When we turn our symbols of operation into variables, we do not thereby remove all constants from our propositions, for the formal laws to which our operations are to be subjected will require constants for their statement. I have succeeded in reducing the number of indefinable terms employed in pure mathematics (including geometry) to eight (a number which may be capable of further diminution), by means of which every notion occurring throughout the whole science can be defined. Thus all mathematics is merely the study of these eight notions; and the Logical Calculus is a name for the more elementary parts of this study. We have here precisely such a development as Leibniz desired to give to all subjects—with the difference, due to the fact that propositions are synthetic, that the indemonstrable axioms of mathematics, instead of being one, appear to number about twenty.¹ Thus Symbolic Logic is distinct from, and logically prior to, the subject which Leibniz calls Universal Mathematics. But the notion of different possible algorithms was very attractive to Leibniz, and the Logical Cal-

¹ The only ground, in Symbolic Logic, for regarding an axiom as indemonstrable is, in general, that it is undemonstrated; hence there is always hope of reducing the number. We cannot apply the method by which, for example, the axiom of parallels has been shown to be indemonstrable, of supposing our axiom false; for all our axioms are concerned with the principles of deduction, so that, if any one of them be true, the consequences which might seem to follow from denying it do not follow as a matter of fact. Thus from the hypothesis that a true principle of deduction is false, valid inference is impossible.

culus presented itself to him as that species of the Calculus of Combination which is subject to the law of tautology ($aa=a$) as well as to the commutative law. This and the geometrical calculus were the two that he endeavoured to develop out of the infinity of algorithms that appeared to him possible (pp. 320-321).

M. Couturat's researches into Leibniz's work on Symbolic Logic are exceedingly interesting: they show the great progress he had made, and the precise causes of his failure. He occupied himself with this subject principally at three periods, 1679, 1686, and 1690. The second of these dates is interesting, for M. Couturat has found a long MS. which completes the *Discours de Métaphysique* and shows its connection with Leibniz's logical studies. The editors, as our author remarks, are the more unpardonable in having omitted this MS., as Leibniz has written on it: "Hic egregie progressus sum" (pp. 344-345).

The system of 1679 represents simple concepts by primes, and conceives their combination on the analogy of arithmetical multiplication. At first, Leibniz thought one number would do for each concept; but he soon found that negative terms were required, and for these he employed negative numbers. Here, however, the rules of composition could no longer be made analogous to those of arithmetic. In order that a complex notion should be possible, it was necessary and sufficient that the positive and negative numbers representing it should have no common factor. He proves many theorems, notably one which he calls "præclarum theorema": If a is b and c is d , then ac is bd . He also arrives at the logical definition of cardinal numbers, recently revived by Frege and Schröder: thus he says that m is one when, if a is m and b is m , it follows that a and b are identical (p. 342). Once only he represented by multiplication what we call logical addition, and obtained the law of tautology for this case also; but he was unable to develop this idea, because he preferred the point of view of intension (p. 343).

In the system of 1686, Leibniz discovered the double interpretation of formulæ, according as single letters stand for concepts or propositions (p. 354). But he involved himself in hopeless difficulties owing to his determination to rescue scholastic logic at all costs. His calculus rightly refused to justify faulty conversions, or to give existential import to universal terms. He remarks: "All laughers are men, therefore some man laughs; but the first is true even if no man laughs, while the second is not true unless some man actually laughs" (p. 359). To avoid this difficulty, he says that all terms are to be tacitly assumed to exist (p. 360); nevertheless he has to admit the impossible, *i.e.*, that there are general terms which do not exist (p. 349). If he had had less respect for scholastic logic, M. Couturat concludes (p. 354), the Algebra of Logic would have been constituted some 200 years sooner.

The system of 1690 adds little to its predecessors. Leibniz

thought that the formulæ for intension and extension were the same, which is only true when addition is everywhere changed into multiplication and *vice versa* (p. 374). M. Couturat sums up his account by saying that Leibniz possessed almost all the principles of Boole and Schröder, and in some points was more advanced even than Boole; but he failed to constitute symbolic logic because it cannot be based upon the vague idea of intension (pp. 386-387). There is, no doubt, a certain broad truth in this statement: the Logical Calculus undoubtedly requires a point of view more akin to that of extension than to that of intension. But it would seem that the truth lies somewhere between the two, in a theory not yet developed. This results from the consideration of infinite classes. Take *e.g.* the proposition "Every prime is an integer". It is impossible to interpret such a proposition as stating the results of an enumeration, which would be the standpoint of pure extension. And yet it is essentially concerned with the terms that are primes, not, as the intensional view would have us believe, with the concept *prime*. There appears to be here a logical problem, as yet unsolved and almost unconsidered; and in any case, the matter is less simple than M. Couturat represents it as being.

Leibniz's Geometrical Calculus, which is discussed in chapter ix., is distinctly disappointing. He was not satisfied with analytic geometry, for it is not autonomous, but requires synthetic proofs of its foundations (p. 400). Not Algebra, he says, but a "more sublime analysis" is the true Characteristic of Geometry (p. 388). What he should have invented was Grassmann's Calculus of Extension; he had at one time the idea of projective Geometry, *i.e.*, of a Geometry using only straight lines, and for this he wanted a "linear analysis" (p. 404, note, and p. 409). He held the view—which, in spite of Kant, is now known to be correct—that Geometry does not depend upon figures for its proofs, but on intelligible relations (p. 401). He made endeavours to analyse these relations: position, he says, distinguishes objects having no intrinsic distinction, but this applies equally to magnitudes, and he failed to make a philosophic analysis of position (pp. 407-408). The fact is that the above is a mark of all asymmetrical relations whose terms are simple; but this fact was a contradiction for Leibniz, as for most modern philosophers, owing to the subject-predicate theory of propositions.

Leibniz at first endeavoured, in his geometrical calculus, to deal with the two relations of similarity and congruence; but later, he dealt with congruence only (pp. 411, 417). From congruence alone he obtained definitions of the straight line and plane; but he was unable to deduce that there are straight lines, or that they are determined by any two of their points (p. 420). He justly remarks: "Imagination, taken from the experience of the senses, does not permit us to imagine more than one intersection of two straight lines; but it is not on this that the science should be

founded" (p. 422). He took distance to be independent of the straight line and anterior to it (p. 417); but he was unable to deduce the fundamental properties of the straight line. He failed to make a Geometrical Calculus, and merely introduced a new and less convenient system of co-ordinates, the system of bipolars or tripolars; and his failure was due to his remaining metrical.

This metrical bias is attributed by M. Couturat (pp. 438-439) to respect for the "narrow, poor and stunted principles of Euclid's Geometry". Doubtless respect for Euclid was one cause of failure; but it appears to me highly probable that the relational theory of space was a more potent cause. When I formerly held this theory, I made almost exactly the same attempts to base Geometry on distance; and if the relational theory were true, such a basis would be alone correct. The straight line, it is true, is generated by a relation, but this relation holds, for a given straight line, between only *some* points and some others, whereas a given relation of distance holds between *every* point and some others. Thus the generating relation of a straight line picks out some points of space as inherently peculiar, so that the straight line, if taken as fundamental, is fatal to thorough-going relativity. Nevertheless, geometry imperatively requires that the straight line should be made fundamental, though distance can be introduced with advantage as a late and derivative notion. A mere mathematician might have been unaffected by this consequence of the relational theory, but not so a philosopher such as Leibniz; and in the discussions with Clarke, the necessarily fundamental nature of distance, in any such theory, often very plainly appears (*e.g.*, *Gerh.*, vii., 400, 404).

In a short conclusion, M. Couturat sums up his results, and ends with an impressive warning against too great respect for authority. Leibniz, he says, was not the autodidact that he boasted himself to be, and erudition interfered with his originality. "We shall never know the price that the human mind has had to pay for over-perfect works such as the *Organon* of Aristotle and the *Elements of Euclid*, nor by how many centuries they have retarded the progress of the sciences by discouraging innovators" (p. 440). An admirable remark for readers! As for authors, the danger of producing over-perfect works is one which is by no means pressing, and need scarcely disturb their equanimity.

The work ends with five appendices and a number of notes, in which much useful information will be found. In the article on Leibniz's metaphysic already referred to, which should be read in connexion with the book, the main outlines of his doctrine of monads are deduced, in his own words, from his logical principles. It is also shown that his Dynamics had very little influence on his philosophy, though his philosophy had much influence on his Dynamics (p. 21 ff.). This is established beyond question by a MS. of 1676, in which most of his metaphysical theories are already to be found, in combination with a belief in atoms (p. 24). The general conclusion, that Leibniz's logic was the true founda-

tion of his whole system, seems thus to be once for all demonstrated.

It has been necessary, in the above account, to review Leibniz as well as M. Couturat, for it may almost be said that the work constitutes a new book by Leibniz.¹ For those who have not read this book, it will be impossible henceforth to speak with authority on any part of Leibniz's philosophy.

Dr. Cassirer, like M. Couturat, regards Leibniz's *Logic* and his investigations of the principles of mathematics as the source of his metaphysical system. Nevertheless his book differs very widely from M. Couturat's in its theory as to Leibniz's opinions and as to the logical and historical order of the various parts of his philosophy. Unlike M. Couturat, the present author has not yet grasped the very modern discovery of the importance of Symbolic Logic. In the philosophy of mathematics, his views appear to agree closely with those of Prof. Hermann Cohen,² to whom the book is dedicated, and to whom acknowledgments are made in the Preface. We find, accordingly, in spite of occasional references to Dedekind and Cantor, but little realisation of even the arithmetising of mathematics, and none at all of the still more recent "logicising," if such a word be permissible. Mathematics, for Dr. Cassirer, is not synonymous with Symbolic Logic, and Logic is synonymous with theory of knowledge. In both these respects, the work is Kantian, and supposes Leibniz, at least in a measure, to be also Kantian. The very rare merit of not imputing one's own philosophy to the author one is discussing belongs to M. Couturat's work, but not, I think, to Dr. Cassirer's; and as mathematics have of late conclusively disproved the Kantian doctrines as to their principles, the result is to rob Leibniz of his most extraordinary merit—I mean, the realisation of the supreme importance of Symbolic Logic.

The work, we are told in the Preface, arose out of questions as to the foundations of mathematics and mechanics. The mathematical motive was paramount in the formation of Leibniz's system, which is not to be judged by the rigid dogmatism of the *Monadology*. Kant's results—*e.g.* as regards the ideality of space and time—were largely anticipated by Leibniz: the originality of the Critical Philosophy lay rather in the form and method than in the results. Leibniz—so the difference is stated in a later passage (p. 264)—says that the methods of knowledge, *though* ideal, are valid for the real: Kant's originality lay in turning *though* into *because* in this statement.

¹ M. Couturat is publishing a large collection of unpublished Leibniz MSS., which will appear shortly.

² Cf. especially *Das Princip der Infinitesimal-methode und seine Geschichte*, Berlin, 1883. This work, though admirable in its historical parts, is now antiquated in its constructive theories.

After a long Introduction on Descartes' critique of mathematical and scientific knowledge, the body of the work is divided into four parts, dealing respectively with Mathematics, Mechanics, Metaphysics, and the growth of Leibniz's system. All knowledge, the Introduction asserts, is for Descartes really mathematics, and magnitude is the fundamental concept of mathematics. Moreover, magnitude is essentially connected with space, and is by Descartes almost identified with extension. By attempting to reduce everything to space, he failed to give due weight to time, and so failed to found Dynamics: his notion of force is only valid for Statics. In his notion of substance he failed to hold fast its deepest meaning, which is (p. 60) "to postulate as a condition of the object the thorough-going unity of knowledge".

In Part I. the first chapter deals with the relation of mathematics and logic. Leibniz assigned to Aristotle the merit of having first written mathematically outside mathematics. All certain knowledge, Leibniz says, incorporates logical forms (of which, however, some are not Aristotelian). Dr. Cassirer, in a true Kantian spirit, remarks that this view is problematical, if Algebra and Geometry contain an independent contribution to method: to reduce mathematics to logic is to loosen its connexion with the sciences of experience and nature (pp. 107-108). To this we must reply that it is now *known*, with all the certainty of the multiplication-table, that Leibniz is in the right and Kant in the wrong on this point: Algebra and Geometry do *not* contain an independent contribution to method; and as for the connexion of mathematics with the sciences of experience, this is precisely the same as that of logic with the said sciences, *i.e.*, they cannot violate mathematics, which is concerned wholly and solely with logical implications, but also they all of them, including the geometry of actual space, require premisses which mathematics cannot supply. This conclusion, originally suggested by non-Euclidean geometry, has now, by the labours of Weierstrass, Cantor and Peano, been wholly removed from the region of dubitable hypothesis.

The author proceeds to discuss the relative importance of definitions and identical principles in Leibniz's proofs of axioms. He decides (p. 109) that the true principles are definitions, while the identical propositions are mere auxiliaries. I do not know whether this view is more tenable than the opposite: Leibniz's opinions could not be clear, as either alternative was absurd, for an identical proposition, if there were any such thing, would be perfectly trivial, while a definition is merely a statement of a symbolic abbreviation, giving information as to symbols, not as to what is symbolised. But here Leibniz's doctrine as to the possibility of ideas becomes relevant—his theory that all (complex) ideas involve a judgment. Dr. Cassirer speaks as though, in this notion, there were for Leibniz no difficulties: the mutual compatibility of all simple ideas is not mentioned. This is an instance (of which others might be given) of failure to apprehend the reasons why Leibniz's system cannot

be accepted as final truth. A concept, Dr. Cassirer says, is not for Leibniz merely a sum of given marks, but the result of a judgment (p. 117). Yet M. Couturat's account of the attempts to construct a Symbolic Logic shows that the opposite statement is at least equally correct, and that there is in fact a contradiction at this point. Possibility, Leibniz says, may be proved by experience of actuality as well as *a priori*. This, the author remarks, shows that the decision of possibility goes beyond ordinary logic, and presupposes the foundations of scientific knowledge (pp. 112-113). The consequence, I think, is scarcely Leibnizian; for where there is no *a priori* proof of possibility, this is because a complete analysis has not been effected, so that we do not know *what* it is whose possibility is proved by experience. Logic, the author continues, is to be transformed from a science of the forms of thought into one of objects; this is to be effected by mathematics, which mediates between ideal logical principles and the reality of nature (p. 123).

Chapter ii., on the fundamental concepts of quantity, points out that Leibniz, like Descartes, starts from quantity, but in the form of number, not of extension: the effect of having started from discreteness is visible throughout his work. He was guided, says the author, by the notion of the identity of logic and mathematics, where logic, to begin with, must be the logic of quantity. But Algebra is not the general logical method, and the science of quantity leads to that of quality. The next chapter, on the geometrical problem of space, asserts that the further development of the notion of quantity is to be derived from the Infinitesimal Calculus, whose presuppositions are not arithmetical merely, but spatial. As a statement of Leibniz's view, this is probably correct; as a statement of the facts, it has been disproved by Weierstrass and the arithmetical theory of irrationals. The essence of space, Leibniz points out—and this is an important truth—is not magnitude, for magnitude belongs also to number, time, and motion, and does not belong to the point, which is yet spatial. Leibniz's x in his *Characteristic*, Dr. Cassirer says, is not a true variable, but a collection: it is not obtained, as in the true notion of the variable, by varying one identical element (p. 155). This remark is not easy to understand, but if it means, as it seems to do, that a variable varies, or has some dependence upon time and change, it is certainly mistaken. The nature of the variable is the fundamental problem of mathematical philosophy, and I do not know any satisfactory theory on the subject. But it is quite certain that the variable is a purely logical notion, introducing only such concepts as *class*, *any*, *some*, and logical implication; to make it depend upon time is to make the mathematical treatment of time itself logically impossible, and to misunderstand the abstractness of Symbolic Logic, in which, though time is absent, the variable is present throughout. The nature of the variable, in fact, is more akin to that of logical disjunction than to any notion involving variation or change.

Chapter iv. deals with the problems of continuity, infinity and the infinitesimal. The exposition is historically careful, and appears to take note of all important passages; but the author's own views are, on these subjects, apparently more in agreement with Leibniz's than modern mathematics will permit. He writes, however, in this chapter, with a certain reserve (*e.g.* p. 218), which makes it difficult to feel certain as to his opinions, or even whether they are definite.

The differential, we are told, is constituted by the qualitative unity of a law, while the integral denotes a magnitude as generated by a law (p. 170). Zero as a limit has positive significance: dx , though quantitatively zero, retains the character of what vanishes, and is intelligible, not as a single quantum, but only in the process. Leibniz showed the impossibility of regarding the continuum as a single datum: only by a law of becoming can it be understood. Thus continuity requires change, but change thereby becomes the necessary presupposition of the concept of reality (p. 185). A simple substance, for Leibniz, is the law of a series, whose terms are the states of a substance (pp. 187-188): or again, it is the general term of the series (p. 538). The constancy presupposed in the conception of being is no longer the unchangeability of a thing, but the methodical constancy of the rule according to which the content varies (p. 189). In these views, which are supported by texts from Leibniz, we must, when we inquire into their truth, distinguish two elements, the mathematical and the philosophical. Leibniz's belief that the Calculus had philosophical importance is now known to be erroneous: there are no infinitesimals in it, and dx and dy are not numerator and denominator of a fraction. The doctrine of limits, by careful statement, has been found alone adequate, and has shown that the Calculus is an advanced and purely technical development of the science of order. The continuum is essentially a single datum, in the sense that it is the field of a given relation; but the essential properties of continuity belong primarily to the relation, and belong to the terms composing its field not *quâ* class of terms, but only *quâ* field of a continuous relation. Continuous relations, so far from depending upon time or change, are not known even to occur in temporal series: the only indubitable instances of such relations are derived from Arithmetic. So far for what mathematics has to say. As regards philosophical questions, I confess that I fail wholly to understand what is meant when it is said that reality presupposes change, or that the constancy presupposed in Being is not unchangeability, but the constancy of a rule of variation. Change of what? from what? into what? one must ask; and these questions can only be answered by means of logical concepts, whose Being is free from dependence upon time, and is thus necessarily unchangeable. Change in an identical content means difference in its relations to different moments of time; but the content must remain strictly self-identical, and this self-identity

is logically prior to change, not subsequent to it. Again, neither Leibniz nor Dr. Cassirer have realised what is meant by the constancy of a rule, the law of a series, etc. These notions mean that the terms whose law is constant are the field of a serial relation: there is nothing constant, so the position may be stated, except the serial relation itself. But the constancy of this relation is precisely the absolute timeless self-identity which was to have been banished; and this will still have to belong to terms as well as to relations, if different relations are to have different fields in any significant sense.

The same desire to make conceptions fluid appears in Leibniz's definition of equality as infinitesimal inequality. Following Cohen (*op. cit.*), Dr. Cassirer approves this definition, and adds that, in modern language (*i.e.* Cantor's), two magnitudes are equal when they are defined by equivalent fundamental series, *i.e. by such as have between corresponding terms differences whose limit is zero* (p. 194). The gloss in italics introduces a quantitative notion wholly foreign to the essence of limits. Equality, to begin with—although, where irrationals are concerned, Cantor's language is ambiguous—is never *defined* by fundamental series, but by absolute identity. And fundamental series may be equivalent, *i.e.* may have the same limit (if any), or define the same segment in any case, although the difference of corresponding terms is constant and infinite.¹ Thus when Dr. Cassirer remarks (p. 197) that the very notion of exactitude is now altered, we must reply: Yes, into inexactitude.

Infinity, the author points out, is for Leibniz that of a distributive, not of a collective, whole: it is not a property of a single datum, but essentially of an infinite process. It is the continuation of a law as against every single term created by the law (p. 200 ff.). This seems to mean that there are relations whose fields cannot in any way be treated as units, and which are such that no finite number of terms constitutes the whole of the field. The difficulty of the view lies in the fact that to be the field of a given relation is in itself a kind of unity, and seems to imply necessarily the existence of a collective whole. But to pursue this subject would take us into the darkest corners of logic. Infinitesimals, it is pointed out (p. 207), are stated by Leibniz to be merely useful fictions. On this point, there is the greatest difficulty in discovering his true opinion, for he certainly used notions derived from the Calculus in establishing force, and in many ways the infinitesimal seems to be involved in his philosophy. But Dr. Cassirer appears to be unconscious, or nearly so, of the magnitude of this inconsistency

¹ For example, if ω represent the ordinal number of the finite integers in order of magnitude, the series whose general terms are respectively $\omega \times 2n$ and $\omega (2n+1)$ both have ω^2 for their limit, although the difference of corresponding terms is always ω .

The Law of Continuity is also discussed in chapter iv. The single concept, we are told, in order to be understood in its origin, must no longer be regarded as a rigid and immovable logical entity: its being is only determined in connexion with a logical system, and the system of concepts must assimilate the notion of logical development. The postulate of continuity is not intelligible if a given material is to be described, but only because it is one of the fundamental acts by which consciousness conditions the object. In more special forms, the law of continuity asserts that extreme cases, from some points of view excluded, may yet be included in general theorems, *e.g.*, propositions concerning the ellipse will hold for the parabola. The general statement is: *Datis ordinatis etiam quesita sunt ordinata*. M. Couturat points out (p. 233), what Dr. Cassirer appears not to have observed, that this principle is regarded by Leibniz as a consequence of the principle of reason; the deduction, however, unlike most of the others, is invalid.¹ Moreover the principle is false in fact, unless it means, what would be perfectly trivial, that the consequents are ordered by the mere correlation with the data. Take, for example, the series of rational fractions in order of magnitude, each in its lowest terms. The numerators of these fractions are one-valued functions of the fractions, but have no order except that resulting from the correlation itself. Again, in the case of the ellipse and the parabola, the latter has some but not all of the properties of the former, and the mathematician's desire to treat such different cases together, though praised by Dr. Cassirer (p. 221), has been a source of constant and most pernicious fallacies. The principle of continuity, therefore, must be regarded as one of the most unfortunate parts of Leibniz's philosophy. Mathematically, it is false; and the philosophical meaning suggested by our author seems to amount to the assertion that everything is really something else—a principle whose merit is, that it excuses us from the necessity of understanding anything because it isn't really the thing we don't understand.

Part ii., on Mechanics, opens with a chapter on Space and Time. Time, it says, is the independent variable in regard to all related magnitudes (p. 257). This assertion is often made, without, I believe, any knowledge of its exact meaning. The only exact meaning of which it is capable is, that any relation relating all the moments of time respectively to various magnitudes of a given kind may be many-one, but cannot be one-one or one-many.² This is of course more or less true of important relations; but if there is any material particle which is never twice in the same position in space, then, as far as that particle is concerned, the

¹ In this M. Couturat informs me that he agrees with me.

² A relation is many-one when a given term has the relation to at most one other, one-many when its converse is many-one, one-one when it is both many-one and one-many.

principle is false, and the positions of the said particle might be taken as independent variable instead of the moments of time. Leibniz's doctrine of space and time is said—and I think rightly—to be astonishingly like Kant's: space and time are not real, nor relations of self-subsistent reals, nor abstract conceptions in the sense of being derived from sense-data; they are creations of the mind, belonging to the system of pure principles of knowledge, by which the possibility of objects as phenomena is secured (p. 263).¹ Space and time are orders of phenomena, not of substances; their ideality was first inferred from the difficulties of the continuum. When monads are said to have position, this is only to be understood figuratively: the spatial order of phenomena is not the image of a non-spatial order of substances; we might regard the monad as the expression of spatial order, but not spatial order as reflecting the order of monads. Time and space, as against Descartes, are co-ordinated by Leibniz. There is nothing constant in things but the law of the series, and the time order, as with Kant, is deduced from causality, not *vice versa*.

The next chapter (chap. vii.), on the conception of force, utilises the doctrines as to the differential which one would have supposed the rejection of the infinitesimal would have rendered unavailable. The first postulate, it says, by which the real is defined, is determinateness of content in the moment; but this content has being only as a term in the series, not in isolation. Thus the momentary content must be conceptually fixed by a law involving past and future. This is effected by *force*, which, we are assured, is for Leibniz synonymous with reality (p. 288). Force is a special form of differential: it is what is real in motion, *i.e.*, the present state as pre-involving the future. The new mathematical method, we are told—and Leibniz does seem to have held this view—enables us to retain the Eleatic postulates as to the rational conditions of being, without excluding plurality and change (p. 292). This claim can be made, we must reply, not by the Calculus, but by the principles of Weierstrass and Cantor: indeed Weierstrass may be regarded as the modern Zeno, since he, first of moderns, accepted the principle of Zeno's argument, rejected by Dr. Cassirer, that every value of a variable is a constant. (This is the abstract form of the assertion that the arrow in its flight is always at rest.)

The principle of conservation is next discussed. Previous and subsequent events are always connected by an equation, "cause = effect". The possibility of satisfying the equation itself decides what events are causally related: the cause is an event, just as the effect is. The principle of conservation is not got from experience, but is a postulate. Dr. Cassirer appears not to perceive

¹ In my opinion, Leibniz had also another theory inconsistent with this one, and if monads mirror the universe, there must be real relations corresponding to the spatial relations of phenomena; but this is a point to which I shall return later.

that it involves an assertion as to the connexion of past and future which may or may not be true, and which elsewhere Leibniz explicitly denies. All equations are logical equations, i.e., they state mutual implications; hence if any phenomena can be found to satisfy the equation "cause = effect," there must be events at different times so related that *each* implies the other. Hence the effect is on the same logical level as the cause, and the past has no logical priority over the future. Leibniz holds, however, that the past is prior in nature to the future (e.g. *Gerh.*, iii., 582); and M. Couturat has shown that this opinion is a vital part of his system (Couturat, p. 222). But Leibniz had not a sufficient knowledge as to the nature of logical priority, or as to the connexion of Symbolic Logic with Mathematics, to have understood the inconsistency into which he was led on this point. Dr. Cassirer holds (p. 331) that it was for the sake of the principle of conservation that Leibniz denied the interaction of soul and body. In view of the texts in the letters to Arnauld and in M. Couturat's work, this view appears to me no longer tenable: the logical argument is short, clear, and on its own premisses valid. I see therefore no reason to require any other ground for Leibniz's opinion.

Part iii., on Leibniz's *Metaphysics*, endeavours to show that his views were practically those of Kant, and that they were derived largely from his scientific studies, especially from Dynamics. Both these opinions appear to me to be erroneous. In rejecting the latter, I agree wholly with M. Couturat;¹ and as he has new documentary evidence, his position may, I think, be regarded as established. The question as to the interpretation of Leibniz's metaphysics is more difficult. Dr. Cassirer regards the passages in the letters to Arnauld as treating the relation of the Ego to its states as *analogous* to that of subject and predicate (p. 358). For my part, I cannot discover any justification for seeing a mere analogy where absolute identity appears to be plainly asserted. The positing of identity, says our author, is only understood by reduction to the conception of the Ego (p. 360). The passage in *Gerh.*, ii., p. 43, appears to me to show quite conclusively that the reduction is the other way. I confess that a subjective view of identity is to me unintelligible. Identity, Dr. Cassirer says (p. 131), is not found by thought, but created in the progress of knowledge. This means that there is no identity until we think so. Nature presents me with Jones, and I, wishing to see my old friend Smith, postulate that it is Smith; and thereupon, as by magic, the thing is done. But what it was I wished, seeing that before my wish the identical Smith had no kind of being, it seems totally impossible to conceive. The whole view, in short, confounds the process of learning with the facts learned, and is unable to conceive propositions except as mental existents. And it seems a sufficient

¹ See the end of the review of M. Couturat, *supra*.

refutation, in the case of identity, to point out that, on the theory in question, the assertion that the Ego persists is purely linguistic, and has no significance except as part of a dictionary.

In a similar subjective spirit, our author discusses the question of perception. The object is a well-founded phenomenon, not because it reflects a transcendent world of absolute existents, but because it represents an order which satisfies the scientific reason (p. 364). In other words, the scientific reason is satisfied by a tissue of falsehoods. The world of bodies is only a content of thought; there is no *ground* for the existence of phenomena. It is a mistake to suppose that Leibniz constructed bodies out of monads. The organic body is not a new element in the monad, but a determination of the content of consciousness (p. 408). To say that monads mirror the universe is only a figurative expression: there is no absolute object, such as would be required for mirroring. It might seem to have been forgotten that there are many monads; but Dr. Cassirer adds (p. 468) that the perceptions of a single substance are not of the system of absolute substances. Since this system alone is real, it follows, one must suppose, that all perceptions are wholly mistaken: for what they perceive is unreal, and what is real they do not perceive. Our objects, we are told, are entirely spatio-temporal phenomena, and monads are not objects of either clear or confused perception (p. 468).

I am far from denying that many passages in Leibniz support this interpretation; but they belong, I think, almost all, to later years, when he had forgotten that his system needed grounds. Before examining the view, I should like to remove an objection, urged by Lotze and endorsed by the author (p. 467), against the view that monads mirror the universe. One thing *expresses* another, according to Leibniz, when there is a one-one relation of the parts of the one to those of the other, as *e.g.* in geometrical projection (*e.g. Gerh.*, ii., 112; vii., 264). Now such a relation is possible both between every pair of monads and between every monad and the whole system of monads. To take an illustration from Arithmetic: consider the various series whose general terms are respectively $1 - 1/n$, $2 - 1/n$, $3 - 1/n$, etc., where n is to take successively all positive integral values. Each of these series is similar both to every other series and to the whole series of series. If every term of each series stood for a state of a monad, and each whole series for a whole monad, we should get here a perfectly Leibnizian world, in which monads would all mirror both each other and the universe. Thus Lotze's objection, to which Dr. Cassirer answers by abandoning the notion of mirroring the universe, appears to be based upon an error.

In order to judge of the philosophy attributed to Leibniz by our author, let us endeavour to state it in precise and un-Kantian terms. Every monad is a causal series, the series being definable by the relation of causality (which must be taken as ultimate) and any one of the terms of the series. All the series are ordinally

similar, and corresponding terms are called simultaneous. (This is in fact the meaning of simultaneity.) Not only do the various series correspond term for term, but also all the parts of corresponding terms (each term being infinitely complex) correspond in the way required for interpreting the dictum that each monad mirrors the universe. Each term is what is called a momentary state of the monad; the monad itself is the generating relation of the series.¹ Each state of a monad is composed of perception and appetition. The latter is an embodiment, in a confused manner suggested by the Calculus and the subject-predicate logic, of the generating relation of the series. The former is a belief in the existence of what are called phenomena—the world of matter in time and space—which however do not exist. Such in outline is the philosophy attributed to Leibniz. Except as regards appetition, there is, I think, no logical contradiction in this system. There is, however, an empirical fact—which, unluckily for themselves, the supporters of the system cannot deny—which is logically inconsistent with it; and that is the fact that parts, at least, of the system have been believed. For the subjective theory of phenomena leads, with the doctrine of the correspondence of monads, to the conclusion that whatever has been or will be believed is false; and a philosophy leading to this conclusion can only be true if no one advocates it. The conclusion will, of course, be denied by supporters of the theory; but the consequence follows inevitably from the doctrine that “only indivisible substances and their various states are absolutely real” (*Gerh.*, ii., 119), together with Dr. Cassirer’s opinion that monads are not objects of either clear or confused perception. For it cannot be maintained that there is another sort of knowledge besides perception, unless at most in regard to God and the eternal truths. To distinguish other knowledge of what exists from perception, it would be necessary to define perception as causally related to its object—a course which is inadmissible in a Leibnizian system.

But innumerable grounds concur in making it improbable that the above were Leibniz’s opinions. In the first place, the attempt to infer Monadism from Dynamics, which Dr. Cassirer attributes to Leibniz, would surely be absurd, if the phenomena with which Dynamics deals are not appearances of monads, but are a mere phantasmagoria in each monad. Solipsism is the legitimate outcome of such a theory. The plurality of monads must have either been deduced from phenomena, or assumed quite arbitrarily.

¹ Dr. Cassirer sometimes speaks of the monad, as Leibniz himself does, as the law of the series; sometimes (p. 538) as the general term of the series. But neither of these notions has the necessary precision: a law is merely a confused way of describing a relation, and as for the general term of a series, there is properly no such entity. When the general term is expressed mathematically as a function of a variable number, the expression indicates that the series is defined by a certain relation correlating its terms respectively with the various numbers.

Again, the organic body, which Dr. Cassirer treats as part of the monad, is said by Leibniz to be composed of subordinate monads (*e.g. Gerh.*, vi., 598); and it is constantly affirmed that monads are dispersed throughout matter (*e.g. Gerh.*, ii., 135, 295, 301; vi., 608; vii., 330). In fact, as soon as matter is regarded as *merely* phenomenal, and not a confused perception of actual monads, all the scientific grounds for Leibniz's views, which are so dear to our author, vanish into thin air. The only remaining ground for plurality of monads would be metaphysical perfection—a principle of which the work before us takes very little account, since it is abstract and purely logical. In fact, the philosophy attributed by Dr. Cassirer to Leibniz is a fairy-tale quite as fantastic and arbitrary as the *Monadology* used to seem to be, whereas the system set forth by M. Couturat consists of deductions, drawn in Leibniz's own words, and almost all of them valid, from logical principles which in his day were universally admitted.

After a discussion of the origin of Leibniz's philosophy, there is a critical appendix in which the author's views are defended against M. Couturat and myself. It is urged (p. 537) that Leibniz's theory of phenomena presupposes a system of fundamental relations not reducible to predications. The reply is, that it is just because of this irreducibility that the said phenomena are regarded by Leibniz as phenomena and not as noumena.

The work is thorough and careful in its use of the sources, though there is, to my mind, a somewhat undue amount of interpretation and a somewhat excessive readiness to regard as figurative expressions which another theory could accept literally. The criticisms which have been made in the above review are almost all of them criticisms of the Kantian philosophy itself, and those who accept that philosophy will find in Dr. Cassirer's book exactly what they desire.

III.—HEDONISM AMONG IDEALISTS (I.).

BY BERNARD BOSANQUET.

It is interesting to observe that Hedonism appears to be making way among Idealists. There are reasons for this, in the modifications which criticism has brought to the views of both the extreme parties to the anti-Hedonist controversy. Psychological Hedonism, more especially, seems to be dead, and its disappearance has brought the disputants nearer together. A certain air of *odium theologicum* has faded from the argument. It is probable that the influence of Sidgwick's views, co-operating with the deeper analysis of recent psychology, has had much to do with bringing about the present position.

Even those who, like myself, are still definitely anti-Hedonistic, must welcome this state of things. It affords some hope that we may attain, as R. L. Nettleship desired,¹ to a genuine appreciation and comparison of the experiences to which we give the name of pleasure, and may learn exactly where the difficulty lies which causes their nature and value to be so divergently estimated.

I have been greatly interested both by Mr. Taylor's and by Mr. Rashdall's treatment of the subject. But on the present occasion I wish to consider Mr. McTaggart's chapter "On the Supreme Good and the Moral Criterion" in his brilliant book of last year, *Studies in Hegelian Cosmology*. This, however its main thesis may stand the criticism of years to come, is for the present a leading document of modern Idealism. Now in such a work, a quarter of a century ago, we should as soon have expected to find a defence of materialism as an advocacy of Hedonism. Mr. McTaggart's view has therefore for those who learnt, say, from Green, the interest of a paradox, while, as I have indicated, it unquestionably belongs to a tendency of the Idealism of to-day.

¹ *Remains*, 1, 7.

I should feel very uneasy in differing from the argument of the chapter in question if I believed that by doing so I finally severed myself from the author's position as a whole. But this does not seem to be a necessary consequence. The author's idea of the Hedonic criterion does not depend so much on his doctrine of the nature of reality and the supreme good, as on his view of the means by which approximations to either can be ascertained. And a difference of opinion here, would not, I think, be fatal to agreement there.

My object in this paper is twofold: (1) To argue that the use or pleasure as a criterion, advocated by the author, necessarily passes into another criterion of a different kind; and (2) to explain and defend this other criterion in a way which I believe would harmonise with Green's ideas, but which I do not profess to find definitely stated in his works.

(1) I need not explain to the reader of *MIND* Mr. McTaggart's theory of Reality. It is enough to say that in this reality, not because it is real, but because it includes the perfection of the nature of individual selves, Mr. McTaggart is prepared to find the Supreme Good. For him, therefore, the Supreme Good contains pleasure, for it contains the satisfaction of conscious beings; but it is not purely and merely Hedonistic.

But, the author contends, the Supreme Good may be one thing, and the criterion of morality may be another. And the criterion, he urges, must be Hedonic so far as a criterion can be operative at all. His chapter aims at establishing this point.

That there must be a criterion of morality, as the following section (100) argues, may be admitted. Moral judgments claim to be objective, and therefore imply a standard by which, at least in theory, their claims are capable of being tested.

But in the conception of the criterion as indicated in the sections 100-102, preliminary to the main argument, we must note certain points.

i. The criterion, it is said, may be other than the Supreme Good itself. The Supreme Good, indeed, we shall find it argued, is so abstract in our knowledge, and in its abstract completeness so remote from our world of matter and of choice, that it cannot form a practical criterion to be applied by comparison with our actions. But (a) an extraneous criterion is of very doubtful value, and in fact may almost be said to constitute a danger, in all complex affairs of conduct and science. It is all very well where an arbitrary sign is annexed by convention to ready-made

alternatives; but a criterion other than the essence is just a concomitant circumstance; and to attend to concomitant circumstances instead of the essence, where the alternatives have to be constructed out of a continuous mass of experience, is a pretty sure road to fallacy. Ideas become fruitful, say in law or politics or science, just in proportion to the precision with which essentials as opposed to concomitants are retained before the mind.¹ Moral action is a very strong case of this principle. It is a very serious matter, indeed, for the mind to be pre-occupied throughout its practical deliberations with ideas which are not of the essence of what it really aims to achieve. It seems likely that such considerations must obtain a weight in the moral disposition to which their nature gives them no real claim.

(b) We should note the admission that to some extent we can see what conduct embodies the Supreme Good least imperfectly (sect. 102). In the later argument (sect. 105) this is, I think, hardly admitted to the same extent. And it might be asked in general how we can judge the fitness of our criterion if the lower degrees of perfection which it is to indicate are in themselves unknowable. But I suppose the answer would be that we presume its appropriateness on abstract grounds (sect. 125).

ii. It is important to bear in mind that any criterion must be individual in application, though the ultimate principle which it involves may be capable of being stated in the abstract. Thus when it is said, "Every moral judgment claims to be objective and demands assent from all men"—"if A asserts that to be right which B asserts to be wrong, one of them must be in error," these are merely the ideal logical postulates which apply to all science or rational judgment as such. They do not mean, and must not be taken to imply, either that right and wrong, in any one's conduct, can, in fact, be readily judged by outsiders, or that right and wrong can be in detail the same for A and B, as long as A is a different person from B or in a different position. The application of a criterion to actual moral conduct must always be of the same nature as the application of scientific principles to the solution of a highly individualised problem. Such a solution is "universal," because it brings to bear the spirit and content of a highly organised system upon a single point; but it is not "general" in the current sense of the word. The criterion, therefore, as applied, must be a concrete system, according

¹ Green, *Prolegomena*, sect. 308.

to which solutions are framed to satisfy complex individual groups of conditions.¹ This the author presupposes in explaining his Hedonic criterion; but appears to me to forget, in discussing the criterion of perfection.

iii. That which can be measured by the criterion can only, it is urged, be likeness to the supreme good and not tendency to hasten or to hinder its advent. The view of section 135, that nothing we can do can hinder (or, I suppose, hasten), the advance of the supreme good, seems to me to supersede this argument, and to be truer. But the interest of the present contention centres on the view advanced in support of it (sect. 102), that a morally good action need not give rise to good, nor an evil one to evil. This is opposed to a well-known passage in Green;² and I believe Green to be right. If, in the temporal succession of events, every characteristic of an action has its necessary sequel—and this surely is inevitable—then the character of good, that in virtue of which it is able, *pro tanto*, to satisfy desire, cannot fail to have a relevant consequence, in whatever shape. It is quite true that such a "good" may provoke evil, or from a higher point of view may itself be evil. But this consequence or character will not annihilate the goodness or satisfactoriness contained in the action, to which the nature of the evil which it is or provokes must always be relative. The conduct of a high-minded reformer and of a selfish demagogue may each of them lead to public disorder, which may call for repression and end in reaction. But the elements at work in the sequence will, so far as the reformer at all achieves his purpose (and if not, his relative good will not be attained), be different in the two cases; in the one the evil produced will be of a higher type, farther on—so to speak—in the dialectic succession, and the relative solution arrived at will comprehend larger elements. In short, the necessity of evil is only tenable because evil has a common root and nature with good—is, as it were, good in the wrong place, as dirt is matter in the wrong place. It is, therefore, that good can enter into evil, just as evil can enter into good; and the principle that evil must come, and must come of good, is no obstacle to the view that the good of a good action is always preserved.

I am not saying that we can help or hinder the advent of the supreme good, because I do not know that we can act otherwise than we do. But I think it clear that in

¹ Green, *Prolegomena*, sect. 377-379.

² *Ibid.*, sect. 295.

as far as any one acts well, there are fewer stages to be traversed before the advent of the supreme good, than if he acted ill.

I have so far argued against the author (a) that in morality it is a grave defect for the criterion to be extraneous ; (b) that it can only be applied through a systematic individualised construction ; (c) that achieved good remains, even if it passes through the form of evil, and therefore if we see our way to what has the character of good, we need not be sceptical as to further tendencies, except on positive grounds which we must estimate in judging it good.

We may now approach the discussion on the two proposed criteria, Perfection and Pleasure, so far departing from the author's treatment as to take Pleasure first (points 2 and 3 of sect. 102), because I hope that the criticism developed in discussing these will be of use to us later on, in dealing with point 1, the alleged uselessness of perfection as a criterion.

I. Point 2, then, is thus stated (sect. 102), "that the Hedonic computation of pleasures and pains does give us a definite criterion, right or wrong". We should note that Psychological Hedonism being dropped, the Pleasure of All, of course, is the proposed criterion. The discussion of it begins with section 111.

(a) We shall readily admit to the author in general that "we know what a pleasure is, and what a pain is, and we can distinguish a greater pleasure or pain from a lesser one".

There are, however, states of consciousness, as he points out, about which we can hardly be sure whether they are pleasures or pains, and many cases in which it is hard to decide which of two pleasures or pains is greater. But, he argues, a difference of which we cannot be sure must be less than any appreciable difference, and a possibility of mistake thus limited can only concern a very small amount of pleasure. The uncertainty thus arising, it is implied, does not show that the criterion by calculation of pleasures fails to give a fairly precise decision. This contention, I think, must be admitted ; as here we are not raising the question whether the criterion is right or wrong, but only whether it gives an answer at all. In speaking of its correctness we shall have to recur to this point.

(b) Next comes the objection based on pleasure being an abstraction. It is urged, the author says, that for this reason "pleasure" is an impossible criterion, being something, in fact, which nobody experiences. The objection, thus stated,

is *primâ facie* readily disposed of, by help of the analogy of the exchange values of heterogeneous commodities. As regards the present question, whether pleasure gives a criterion that can be used, this is decisive so far as the mere fact of abstraction goes. But it does not show that a quantitative unit can, in fact, be applied to abstract pleasure,—a point which will occupy us directly.

I am accustomed to regard this objection from the abstractness of pleasure as holding more especially against its correctness as a criterion. With a view to that issue I will here merely note that the author's defence inevitably implies that all equal amounts of abstract pleasure, including equal algebraical sums of pleasure and pain, are ethically interchangeable. This is subject of course to his final reservation on the limits of applicability of the criterion.

(c) I will follow Mr. McTaggart in discussing at this point (sect. 114), the objection that pleasures vanish in the act of enjoyment so that a sum of them cannot really be possessed, though this, as he points out, is an objection against pleasures forming the supreme good rather than against the Hedonic criterion.

The author's reply is in effect that while we live in time any good whatever can only manifest itself in a series of states of consciousness. If we say that the states in which perfection or the good will are manifested have the common element of their characteristics running through them and uniting them, he answers that pleasant states have the common element of pleasure. If we urge again that pleasure is an abstraction and so knits the successive states but slightly together, it is replied that every pure identity running through a differentiated whole is to some extent an abstraction, by abstracting from the differentiation. Perfection or the good will, therefore, if conceived as timeless elements of a consciousness existing in time, are just as much abstract as pleasure under the same conditions; while if a timeless consciousness could come into being, a feeling, such as pleasure, would be as fit, or fitter, to enter into it, than a state of cognition or volition.

Here I am strongly convinced that the anti-Hedonist does not get substantial justice from Mr. McTaggart. His analysis seems to let slip the peculiar nature of the experience in question. To begin with, I am for once not satisfied that the logical point is rightly stated. An identity, which is sustained by the co-operation of differentiated parts, is surely on a different logical footing from an identity which lies in a general quality, common to two contents,

or persisting in a single content. The former is such as the power of a machine to do certain work, the latter is such as the colour it is painted. It is true that each can be stated in a single phrase, and thought of, up to a certain point, in isolation from the machine as a whole. But the former cannot be truly thought of in this way, that is, if so thought of, it cannot be understood; while the latter loses little if anything by being thought of in isolation. Identities of the former type I should naturally call concrete, and only those of the latter type abstract. It may be only my King Charles' head, but I almost suspect that a tacit confusion between identity and similarity is here playing us a trick. A true concrete identity is based on differentiation, and is curtailed by abstraction, *qua* identity, in the same ratio in which the differentiation itself is so curtailed.

Now a consciousness, even a consciousness in time, in so far as it realises a degree of perfection or of the good-will, is an identity of the former type. A consciousness of which we only know that it realises successive states of pleasure, need only contain an identity of the latter type. The former is held together by a unity touched only at its margin by succession. Its edges are washed by time, but its own elements are not in succession to one another. The latter, for all we know, may be a succession having in common almost no assignable element of unity at all. We really can say hardly anything as to the minimum conditions involved in a succession of pleasant states. But we can say, I think, that taken at any two points of the succession it need exhibit no tendency whatever to grow towards totality. The old criticism remains therefore unassailable, that the hundredth pleasant state need find us in possession of no more pleasure than the first. With perfection or the good will this is not so. The accidents of life may frustrate their development; but in so far as they display their nature—and this is surely the case we ought in fairness to consider—they involve a certain structure of the mind and character, of a logical type which necessitates an appreciable achievement of harmonious structure, and a progress in the same direction.

It may be urged that succession in time is a false appearance, and that in the reality the vanished states of pleasure cannot be lost, but must be gathered up as parts of the timeless whole.

But granting this reply to be just, it comes equally to the aid of the good-will in respect of the successiveness which attaches to its realisation in time. Only, whereas in the case

of pleasant states the character of totality may hardly have begun to show itself, in the case of a realised perfection it already to some extent is achieved. In the former there is a new character to be created, in the latter only a defect to be removed. I feel sure that to call perfection and good-will "just as much abstract" as pleasure, is an overstatement. I judge that in the general line of this argument I should have Mr. Taylor's assent.

No doubt the difference between Mr. McTaggart and myself as to the reality of a sum of pleasures is accented by our disagreement as to the Hedonic criterion. Pleasure indicates satisfaction much less closely and less correctly for me than for him.

(d) The next question to be raised is whether Pleasures and Pains can not only be compared in magnitude, singly, each to each, but can be compared in sums themselves obtained by addition or subtraction. So far as the discussion hinges on the theory of intensive quantities I will defer it to the point at which the author deals directly with this subject (sect. 122).

Before coming to this, however, we have to meet an argument based on introspection (sects. 116-7), which urges that in everyday non-moral action, and also even in non-Hedonist morality, we do as a fact continually decide questions which involve the comparison of pleasure-totals formed by addition and subtraction. The appeal to introspection is particularly interesting, as I implied at starting, in the present situation of the Hedonist controversy. If it is conducted with care and frankness it ought to lead us far towards ascertaining the reason of our differences. I find the verdict of introspection on cases of the kind adduced to be not quite simple, and I believe there is risk of misinterpretation. The examples offered by the author are such as a choice between two dinners of equal cost and wholesomeness—must we not and do we not here add together the expected pleasures within each alternative, and come to a decision by comparison of the sum-totals? Or in choosing between means, themselves morally indifferent, to a given moral end, or in trying to give pleasure as such to others—a duty, the author urges, on any moral theory—or in weighing the importance of an intense feeling against that of a number of weaker feelings in the same person or in others; in all these cases, it is urged, we do actually come to a decision; and either we must arrive at it by addition of pains and pleasures, or we must admit that we are working in the dark.

The verdict of introspection in these cases seems to me,

as I said, not quite simple. On looking into the author's account, we note that he appeals to introspection mainly for the fact that such cases exist, and that we feel ourselves able to decide them, and that we should not admit our decision to be merely capricious. That, in deciding them, we compare totals of pleasure and pain, is not so much accepted from introspection as argued from the impossibility of any other alternative in face of the admissions of introspection.

Perhaps we might try to carry the matter a little further in the province of introspection, and see what result we can get. There are well-known cases in which we seem to come as near as we ever can to the attempt to balance totals of agreeables and disagreeables against each other on their own merits. I am thinking especially of the deliberations in which we make plans for a holiday tour, when we have to choose a route of travel with longer or shorter sea passage, to decide whether to take tickets for train *de luxe* or first or second class, whether and when to break the journey, and so on.

Now obviously we do go over in our minds the *pros* and *cons* of plans consisting of such combinations as these, and we try, in some way or other, to balance the several plans against each other with regard to their respective agreeables or disagreeables. Probably experiences will differ as to how far we can make up anything like a sum-total of pleasantness in favour of each plan. I should be inclined to say that we do not succeed in getting anything like a single resultant of pleasantness or unpleasantness for each alternative plan, but continue to think over the attractive and unattractive elements of each as so many distinct features of it. No doubt we arrive at being aware that one plan has more disagreeables attaching to it than another, and we form an impression whether another plan has any grave inconveniences which outweigh this number of nuisances. But, so far as my experience goes, I do not believe that one arrives at a consideration of each plan, including all its attractions and the reverse, as a homogeneous amount, in which the items are merged.¹ We keep recurring, rather, to the actual content of each plan, and consider how far it corresponds to what we want; that is to say, how far its details do or do not satisfy the conditions failing which we should pronounce our holiday "spoilt". This comparison then is hardly a true quantitative comparison. It passes from enumeration with

¹ This is surely the true test whether or no we have got a quantitative total. In a true "sum" the peculiarities of the items are lost. 200 lb. is 200 lb. whether you are weighing children or coal. If the nature of the items affects your choice your choice is not based on quantity.

very rough feelings of magnitude into something more like estimating the degree in which, say, a number of architects' designs meet the requirements in view of which they have been framed. "The degree," it may be replied; "then your comparison is quantitative after all." This example I think extremely significant. Suppose there is a competition of designs, and you give marks for the degrees in which requirements are fulfilled; or, indeed, we may take the case of any examination in which marks are given. This is a rough way of symbolising the relation of performances to requirements; but it is not the result of a calculation, or true handling of quantities, except in so far as requirements are subdivided, separate marks assigned for conformity to each, and subsequently added together. But we know that the more this is done, the less reliable the result becomes; and a highly skilled assessor or examiner, if compelled to use marks instead of reporting in detail, is inclined, I suspect, to make sure of his totals first, and subdivide them afterwards, i.e., to "cook" his marks for details. And the reason is that in each case you are translating the fulfilment of concrete conditions into the bare form of quantity, and the more the arithmetical element enters in the more is the bareness of this form perceptible. If I prefer this design very greatly to that, I may simply give the one 200 marks and the other 100; but it would have made no serious difference if I had said, instead, 180 and 100 respectively. I convey, roughly, the fact that I think the one a good deal better than the other. But if I take 200 as full marks and try to divide the requirements to be satisfied into ten heads with twenty marks each, and assign marks on this hypothesis, and sum them into totals, I shall probably find my total fail to express, even roughly, my true preferences, unless I have as above suggested adjusted the subtotals to the total required. And the reason is that the process is not a result based throughout on the handling of quantities. The relation of each character in the design to a requirement, and of each requirement to the whole, is concrete and individual, and needs to be represented in the intelligent language of a detailed report; these relations are not quantities; and the reduction or rough translation of the mere fact of preference into quantity, as a *memoria technica* for comparison *ad hoc*, has an accidental element. In a single preference this matters little, because re-translation is easy; but in the arithmetical handling of a number of preferences it tends to monstrous errors. Or a simpler case may put the point clearly enough. Let the question be which of two pocket knives, or guns, or micro-

scopes, will suit me best. Of course in preferring one to the other I make a comparison which, *qua* comparison, has a quantitative side. But to try to reduce it to the bare form of quantity by, say, giving marks to the competing objects for their different qualities, would be darkening counsel. I have the requirements and the performances directly before me, and can estimate in the concrete how far the one is adequate to the other. To substitute an arithmetical process for this comparison would be a loss by abstraction, even if it were possible. The true typical case, under which all these choices should be ranged, is, I suggest, the comparison of theories with reference to their truth, that is, with reference to their comparative adequacy in view of a given scientific situation.

With reference, then, to complex totals of pleasantness, I am not maintaining that introspection wholly denies the possibility of comparing them. I am rather arguing that it gives the limit of the process, in the consciousness of a number of elements, which we do enumerate and more or less attempt to weigh against each other. And I urge that in the attempt to push this process further it inevitably passes into another, of which the ultimate type is found in weighing theories with reference to their adequacy.

And Introspection seems to convince me of a further point, which may be due to my prejudices, but *primâ facie* is a datum deserving to be considered.

I am pretty sure that the ordinary mind does not like these attempts at complex comparison of sheer agreeables and disagreeables. We enter upon them only when considerations of interest and efficiency fail us. We find them most troublesome and unsatisfactory, opinions, even within one's own mind, varying about them in a remarkable way. It may seem to contradict this statement when I agree that such a choice as that between the two dinners (though I cannot remember—and here others agree with me—ever to have made a choice that fulfils the supposed conditions) might be readily made. I believe the reason of this to be, however, that one would be guided by the first liking, or more probably, disliking, that came to hand. We should be uneasy to find ourselves reflecting in cold blood on such a subject, and we have, rightly as I think, been trained to make choice in matters of that kind without displaying deliberation. I think therefore that even this experience really supports the opinion that the whole business of calculation, as applied to pleasantness, seems to us a *pis aller*, an undesirable preoccupation of the mind, which we only submit to when we can think of nothing better.

When we come to anything so serious and demanding so much precision as weighing something important to oneself against something affecting a number of others, but probably much less important to each of them, I feel sure that we do not proceed by balancing a single intense feeling against a sum or indeed a product of weaker feelings. To multiply a weaker feeling by twenty or thirty, not to say a thousand or a million, and set the product against a single intense feeling, is, I am sure, something which we cannot even attempt, though the questions in which the use of a Hedonic criterion would require it to be done are of everyday occurrence. Our decisions in cases of this kind must rest, I think, on the acceptance of some hierarchy among the activities of life, and an opinion as to which of them will be most hindered by our conduct under the circumstances.

It is to be borne in mind that taking perfection as our criterion we are not barred from recognising pleasure as an evidence, when no better can be obtained, of certain elements in it, because we are working with a comprehensive idea of satisfaction; while adopting a Hedonic criterion, on the very ground that it can be applied with precision while degrees of perfection are unknowable, we are barred from supplementing it by any other tests of satisfaction.

Indeed, one cannot help feeling that in some respects the Hedonic criterion brings us back to the standpoint of Psychological Hedonism. It is much, no doubt, to have broken the circle of Egoism. But still, though the abandonment of Psychological Hedonism involves the position that our main desires are for objects which satisfy, and not for pleasures, the Hedonic criterion debars us from using directly the character of satisfactory objects as such for a test of what is likely to satisfy. I shall return to this point in dealing with the correctness of the Hedonic criterion.

One word on the argument (sect. 117) that morality itself requires us to choose, *ceteris paribus*, pleasure rather than pain, and to aim at giving pleasure to others—a requirement which cannot be fulfilled without calculation of pleasures and pains. I reply in substance by pointing to the result which we drew above from the comparison of pleasure, as a measurable aspect of action, to the exchange value of commodities. In strictness it followed that all equal amounts of pleasure, however compounded, were ethically interchangeable.

I do not believe that the moral consciousness endorses the alleged moral requirement, as it would have to be construed in face of this strict interpretation of amount of pleasure.

We never, I believe, feel ourselves bound to compare abstract amounts of pleasure either in our own behalf or in that of others. We never, that is to say, try to compare them impartially, going out of our way to look for the greatest possible quantity. We do feel bound to promote the life and satisfaction of ourselves and others; but such promotion always involves a reference, even if tacit, to definite lines of living and enjoyment, presupposed in our general standard of life. It may be objected that this is bringing in the reference to welfare or perfection, which was *ex hypothesi* to be excluded. It amounts, we may be told, to denying that the *cetera* ever can be *paria*—that morality can be indifferent as between two ways of enjoying ourselves. What I desire to urge on the other hand amounts to this, that life after all is a unity; and the very fact that two modes of enjoyment seem to me ethically indistinguishable, and also that I want one of them more than the other, is a fact, not strictly indeed of my morality, but of the determinate structure of my being.

Now I deny that I feel bound to consider, as in strictness I should according to the theory before us, which of these, or whether any other course, will bring the greatest pleasure as such. I do what I want most, or what attracts me most, and, morality not forbidding, help others to do the same for themselves. Of course, Psychological Hedonism being dropped, it cannot be assumed that this *means* acting with a view to the greatest pleasure of myself or others. The question before us is, which way of looking at the matter is usually acquiesced in; as an argument to show which the moral consciousness demands. What I urge is, that we accept our wants as being along certain lines, grounded in the positive unity of our nature, even when outside morality. There is no impartial scrutiny of experience, to find where the greatest pleasure can be had, except *de minimis*, when we feel that we are out of touch with the true test, which is, simply, what we *really* want.

(e) In sections 122-3 we come to the direct argument against an objection to the effect that pleasures, being intensive quantities, cannot be added and subtracted. The way in which this is met seems to me unsatisfactory.

The form of the objection is taken as an admission that pleasures being intensive quantities are quantities. From this the characteristics of quantity in the fullest sense are inferred of them, *e.g.*, that they can be brought into numerical relation with other quantities of the same kind; and that you can affirm the pleasure in A to = the pleasures in B

and C together. Thus it seems to follow that the difficulty which is practically found in equating them is merely analogous to the liability to error attaching to all quantitative judgment whatever. And so there comes out the result that pleasure is as good a quantity as feet and inches, only rather harder to judge of in practice.

But this seems to me to presuppose the point at issue. It is clear that pleasure, so far as quantitative, is intensive, but the question is how far it is quantitative. Intensity, it may be agreed, involves the idea of a more or less of the same; but there are plenty of perceptions of more or less for which no measurement by a constant unit, and therefore no true quantity, has been or apparently can be established.¹ It is a matter of words whether we call such perceptions quantitative. But it seems clear that if they are quantitative, it is in a sense which does not involve numerical relations. To judge that $A = B + C$, is beyond the mere perception of more and less, which involves neither a judgment of equality, nor an analysis of one term into two definite quantities. But it is short of numerical comparison, which surely must be taken to demand a total of units on one side of the equation at least.

Thus I do not find the difficulty where the author finds it. I do not see that "intensive" is a ground of objection, if "quantity" could be proved applicable. But to refute an objection based on "intensive" is, to my mind, in no way to establish the proof of "quantity". That must be independently sustained. The possibility of establishing anything like a true unit for amounts of pleasures and pains, even supposing the two could form part of the same quantitative series, is a psychological problem which I do not feel competent to discuss. It would seem necessary first to show not merely that all pleasure and pain is homogeneous *qua* pleasure and pain, *i.e.*, distinct from other elements of feeling and content (which was admitted provisionally on sect. 112), but that it is capable in itself of being represented by degrees of a single series, *i.e.*, has only one dimension,² so to speak. And then it would be necessary to show that the degrees of this series were true units, such that a number of them might be taken as a true multiple of one. Considering, *e.g.*, the peculiarities of the sensation differences

¹ I should say that the intensive and extensive aspects are both of them necessary to quantity in the strict sense. But without raising this difficulty, it seems plain that numerical comparison cannot be had without the establishment of a constant unit.

² Mr. Taylor has pressed this point upon me in conversation.

dealt with in Weber's law, it would seem as if great difficulty might be met with here. Though pleasure may be homogeneous, its stimuli are heterogeneous; and any attempt at measurement would here lack the support which the precise variation of the stimulus affords to experiment with the specific sensations. The economic analogue of Weber's law seems subject to extensive reservations.

(f) There is a further point, affecting the workableness of pleasure-pain reckoning, to which my previous remarks on the tendency to convert it into another method may have served as a preface. I may call it the relativity of pleasure.

If Hedonic calculation is to be true calculation it must start from definite magnitudes, which must be traceable, through purely quantitative processes, down to the results obtained. If, in the deliberation which is to be represented as calculation, an object becomes more attractive, it must have been shown to carry with it a new pleasure which has had to be added to its original pleasurable-ness. If it becomes less attractive, it must have been proved to carry with it a pain which has had to be subtracted from its original pleasurable-ness. Its original pleasurable-ness, in short, is a magnitude which can only be modified by addition or subtraction. Even if outweighed by greater pleasure incompatible with it, the original pleasurable-ness should still remain as a weight in the lighter scale. The magnitudes should be constant for the whole stretch of life to which a single deliberation applies; or at the very least throughout a single deliberation.

But in fact, as it seems to me, the magnitudes of pleasures and pains are reacted upon by the combinations conceived in deliberation, or met with in life, in a way wholly incompatible with that just described. A pleasure which seems strong at first, simply fades away in the light thrown upon it by a certain combination of objects of action. It need not be cancelled by associated pains, nor overbalanced in the scales by greater incompatible pleasures. For that ought to mean that it continues *per se* to be as pleasant as before, but is shown, owing to circumstances, to bring with it a pain not before observed to attach to it, or to be outweighed by incompatible pleasures not previously noticed to be possible at all, or to be incompatible with it. Its original magnitude should subsist, like that of a pound weight in the scales, whatever you add to its side or the other. Or even if you say that you subtract from it by cancelling part or the whole of its magnitude, by reason of combination with a negative quantity, as you may withdraw a pint of water from a quart, still its

original magnitude should subsist ideally, and be traceable by arithmetical laws in the result of the deliberation.

But what happens in every deliberation upon serious matters is not in the least like this. The *prima facie* magnitudes of pleasures and pains change their amount or their sign with the combinations in which they are considered, because of the way in which those combinations alter the direction of our interests and our wants. Interest, satisfaction, expected pleasure, are not constant magnitudes attaching to particular acts or objects, but are determined by the whole fabric of purposes and satisfactions which life presents before us from moment to moment. Now it is the essence of deliberation to change this presentation by readjusting the emphasis of its outlines, completing some and obscuring others. In this process some things which fell *prima facie* in a main line of interest are shown not really to be so. Other things, not attended to at first, take the place of the former and promise a satisfaction which they cease to offer. A man is reading an ordinary novel with enjoyment. A newspaper comes in with exciting intelligence; perhaps with the continuation of a controversy in which he is profoundly interested. He does not subtract the enjoyment of going on with his novel from the greater enjoyment of reading and discussing his newspaper, and turn to the second in virtue of the surplus of pleasure to be gained by doing so. The momentary adjustment of his interests is modified. The novel, for the time, has ceased to please. Our interest, as we say, is called away. This is not an effect of relations of magnitude. It is an effect of the peculiar bearings of the various objects of life upon one another, according to the shape which our plan of satisfaction is able to adopt at the moment. Relations of magnitude, as we said before with reference to the assignment of marks, are the effect, but not the cause. It is as if one thing were not merely outweighed by another, but lost its weight in a certain comparison, or as a colour which is pleasant in one combination becomes painful in another. The new fact is not, or at least need not be, pain of discord less pleasure of colour, leaving overplus of pain of discord. The colour is now differently seen, and now seen as painful throughout. And deliberation just means readjusting the combinations in which things are seen. The object itself is altered. There is not a persistent Hedonic effect which is overbalanced.

It might be objected that these consequences cannot be lawless or irrational, and that if we knew the actual nature of the interests concerned we could, theoretically, deduce or derive their bearing on each others' Hedonic effects from

their nature, and this would be the required Hedonic calculation. But my point is, that the laws of the combination, though certainly not irrational, are yet not arithmetical. They are the laws of the logic of desire, by which its objects include, modify, reinforce or supplant each other; and they deal in every case with the growth of an individual concrete whole, perpetually modifying itself. Deliberation which consists in a phase of the life of such a whole differs in principle from the type of calculation.

In answer to these remarks Mr. McTaggart would perhaps refer me to that part of his argument (sect. 132), in which he maintains that Hedonic calculation is not always a correct guide to the fuller development of our ideals, but only to their fuller satisfaction by the environment. It is indeed probable that my difference from him consists in suggesting that the object of desire likely to give satisfaction under the conditions of present action is ascertained by a process much the same as that which he confines to the change or modification of our ideals in lapse of time. "Our desires," he says (*loc. cit.*), "have a dialectic of their own." The phrase seems just what is wanted to express the real determination of conduct with a view to satisfaction, of which, as I believe, Hedonic calculation is a travesty. I will try to explain further below.

II. So far we have been dealing on the whole with the question (point 2 of sect. 102), whether the calculation of pleasures and pains gives a definite moral criterion, right or wrong; though it has not proved possible to keep this wholly apart from the general discussion of Hedonism. Now we turn to point 3 of section 102 and ask (sect. 104) "Even if pleasure gives us a criterion which is applicable, does it give us one which is correct?"

The author's answer involves the distinction which has just been mentioned. The Hedonic criterion would be a trustworthy guide to that element of the Supreme Good which consists in satisfaction of actual ideals. To development or perfection of the ideals themselves it does not bear a uniform relation. Subject to this distinction, the positive argument advanced occupies only six lines. Happiness is proportioned to harmony with surroundings; if we aim at Happiness we aim at harmony between individuals and their surroundings, and this is to aim at one element in the supreme good. It should be noted that this argument if successful would destroy the relevancy of the objection taken above to an extraneous criterion. I believe however that this argument is itself irrelevant.

We are surprised to find a long chapter of a familiar controversy omitted at this point by the immediate identification of Happiness with the greatest quantity of Pleasure. I imagine that in the author's judgment his arguments to show that the summation of pleasures has a meaning, have removed the objections commonly made to this identification.

I am obliged to impeach this identification not merely from doubting the possibility of summation of pleasures, but for more direct reasons. I must therefore resuscitate the controversy in question, which, though it has the defect of belonging to an acute phase of the anti-Hedonist dispute, has the merit of turning our eyes directly on the experience under discussion.

I have tried to show that Hedonic calculation becomes unworkable just about at the point where if workable it would be applicable to the serious direction of life. And I now contend (point 3 of sect. 102), that if, by restricting ourselves to the more calculable levels we made it appear to be workable, the results would be unreliable or worse, even with respect to happiness or harmony with our surroundings.

I take the word Happiness to be primarily the name of a problem. It indicates, as I understand, that which would satisfy us, whatever it may prove to be. Whether it is or is not coincident with the greatest quantity of pleasure, is for me an independent question. Happiness, complete satisfaction, it may be conceded, must be what we mean by the good—that which we really want. But this does not establish the correctness of the Hedonic criterion until we know that this criterion points the way to happiness or satisfaction. This is the essence of the question before us. We have seen, in discussing the workableness of the Hedonic criterion, that it is extraordinarily impartial, *i.e.* that for it sums of pleasure and pain, compounded absolutely anyhow in complete abstraction from their contents, are equally choiceworthy if equal for Hedonic appreciation. We also saw that quantitative Hedonic calculation tends to pass into something else when we arrive at the more complex relations of life considered as a design.

Following up these suggestions, I am going to recur to the old topic of the pleasures of the natural man as the crux of ethical and æsthetic science. The whole *raison d'être* of these sciences when one first approaches them, certainly seems to be in the paradox that what is pleasant to the natural man is not right nor beautiful. If, one is inclined

to say, it were true that pleasure is the guide to the good and beautiful, then in face of so simple a clue, these elaborate sciences could never have grown up. The contradictions which arise in applying that proposition have been the real ferment through which ethic and æsthetic have developed. Now it is quite conceivable that in the body of the sciences these contradictions may be overcome, and the above proposition victoriously reinstated. But plainly we are going wrong if we do not give some weight to the facts which make the conflict so serious—make it occupy, in fact, the whole working area of moral and æsthetic life. It may be said that the radical mistake of the natural man is to pursue his private pleasure and not the pleasure of all; and that when this is set right, the great contradiction between pleasure and good is in principle overcome. And the idealist Hedonist of to-day of course takes general and not private pleasure as his criterion. But I would point out that in æsthetic there is strictly no such distinction as that between private and general pleasure; and yet the contradictions which arise in taking pleasure as the clue to excellence are more marked perhaps than they are in ethics. I mean simply that, except with rare and gifted minds, the natural man, in as far as he follows what pleases him, is certain to be wrong. In æsthetic and in ethic alike, let him ever so much set his heart on general and not on private pleasure, the bottom fact is that his only chance of obtaining the fuller satisfaction is to make an effort which is in the direction of the greater difficulty. This effort corresponds to the apparent contradiction which the principle of pleasure has to explain away before it can even appear to cover the facts. If quantity or pleasure is the guide, why all this effort and explanation? A natural answer comes: "In the application of our pleasure arithmetic". I have tried to show that this does not really work. But now I want to make a more positive suggestion on the lines indicated above.

I will recapitulate the data as I see them, data presented equally by ethic and æsthetic. Up to a certain point of complexity pleasures and pains seem comparable by a direct quantitative process. Yet the natural man, man in as far as he adopts the direct process, is always tending to be wrong in his choice, to be wrong, because he misses satisfaction, both by his own admission and by the test of critical experience. And, in our choice, we are all constantly tempted to be the natural man, and so to be wrong. And in this way we daily and hourly miss satisfaction. It is further granted that right choices would and do bring a relatively full satis-

faction, something which we ultimately prefer, and up to a certain point can acquiesce in.

Now, how does the natural man, in the sense of man *qua* following the greatest apparent pleasure, miss his satisfaction? What would the effort, which admittedly he fails to make, achieve for him? What is the source of the elaboration of ethical and æsthetic science?

You may say, "He does his Hedonic sums too carelessly. If he made a more serious effort he would do them better. Ethical and Æsthetic science consist of the theory of Hedonic arithmetic."

But it is very hard to see, if calculation were all, how difficulty and resistance should creep in, as they do. I suggest therefore another answer. He goes wrong precisely by attending to the more obvious characters of facile satisfaction. These are just the characters which can, apparently, be quantitatively estimated. The difficulty of the right choice comes from the need of attending to other characters. And these other characters are what ethical and æsthetic science develop. I will try to explain. There are pleasures which it needs no effort to enjoy. There are others which need effort to enjoy, and which need effort also to guard and sustain their enjoyment. The fuller satisfaction, by the unanimous voice of critical experience, belongs to a life in which the latter bear at all events a very considerable part. The fullest satisfaction to be had in human life is for normal natures only to be won and maintained with constant exertion. There can be no doubt that fairly full satisfaction is to be had, and there can be none, I think, that it is only to be bought with serious effort.

The "easy" pleasures, as I may call them in a word—those which are practically of universal attractiveness to healthy human beings—are the most readily treated as magnitudes by Hedonic arithmetic. They are on the whole I suppose what would popularly be called bodily pleasures. I do not mean to say that a hard and fast line can be drawn between them and the more arduous kind of satisfaction. But yet there is a pretty obvious distinction which runs through the whole of ethics and æsthetics. The "easy" pleasures, though they may vary from repose to the most strenuous bodily exertion, appear to "come natural" to the healthy body, and their excesses, though incompatible with true health, also "come natural". It is urged, as by Plato, that they lead to or are mixed with uneasiness; but, at the moment of impulse, they have no uneasiness to overcome.

The "arduous" pleasures, or better, satisfactions, have a complex character which embodies the whole ethical and æsthetic difficulty of which we have been speaking. No one doubts that the satisfaction which they give is fuller and more harmonious than that of the bodily pleasures or those which relatively approach the nature of the latter.¹ But every one, except perhaps remarkably gifted natures, experiences a certain resistance in the enjoyment of them. They involve an exertion comparable to that of serious intellectual work, a resolution of discrepancies, and a maintenance of unusual and exhausting moods of feeling. Nearly every one, I take it, has some little shrinking from reading or seeing on the stage the "Oedipus Tyrannus" or "King Lear". The spirit is willing, but the flesh is weak. The contradictions in a great tragedy are no doubt resolved, but their presence and the tension which they imply are just what gives the depth to æsthetic satisfaction. And so in ethics. To conduct a great enterprise bringing into unity jarring passions and interests is perhaps the fullest satisfaction in the world ; but the man who is doing it would often possess greater pleasure if he were cultivating his garden.

The distinction we are speaking of is the same that James refers to when he points out that we do not speak of a victory over our ideals, but we do speak of a victory over our self-indulgence. And it is the foundation I suppose of Spinoza's contrast between the strength of passion and the weakness of "active" emotions,² or between *titillatio*, local or partial pleasure, and *hilaritas*,³ the pleasure attending upon a fully organised intelligence. It is the old *primâ facie* distinction between yielding to temptation and doing right. The rejection of egoism does not destroy the difficulty in principle. We can yield to temptation for others as much as for ourselves.

Now it is a very heroic measure, as it seems to me, to assert in the teeth of this fundamental difficulty that quantity of pleasure is the clue to greatest satisfaction. Of course we are not to argue that the object which *de facto* we prefer must be preferred *qua* the greater pleasure ; if we said that, we should be back in psychological Hedonism. Yet no doubt we must maintain, what all experience and science agree to, the greater happiness or satisfaction of the more harmonious living. But to maintain this on the quantitative

¹ Cf. in Mackail's *Life of Morris* "the physical craving for reading was unknown to him". I quote from memory.

² Joachim's *Spinoza*, p. 258.

³ *Ibid.*, 263 n.

basis is, I suggest, to maintain a true conviction on the wrong grounds.

I believe that common instinct is right and that, so far as true quantitative estimates can be carried, the peculiar experiences which I have called the "easy" pleasures will always have an advantage in choice from the facility and obvious intensity which so easily turn them into temptations. I do not believe that the main difficulty of ethics and æsthetics can be disposed of in this way by simply ignoring it. We must admit, I am inclined to hold, at least a possibility that greater quantity of pleasure, so far as the phrase has a meaning, might often go with the less complete satisfaction. All satisfaction must be pleasurable; but it is a misinterpretation of the appearances to say that the fuller satisfaction is the more pleasurable.¹ It is conceivable that pleasure should be a concomitant of satisfaction—which I take to be synonymous with happiness—without being proportional to it. A relation of this kind seems not impossible. It would involve the presence, in quantitative pleasure *par excellence*, of some element which in the higher satisfactions was present in a less degree, either absolutely or relatively. Violence of sensation, perhaps, is an example of such an element in the case of æsthetic enjoyment.

What can be meant by a fuller satisfaction which is not necessarily a greater pleasure? What I have in mind is such a difference as that between great art and literature, on the one hand, and "popular" art and literature on the other, or in ethics, between a serious and responsible undertaking and any kind of sport or amusement. The general theory of the contrast must be, I presume, that the former evokes our nature more nearly as a whole, and the latter more partially. But these phrases, "as a whole" and "partially," are deceptive when applied to an organised system, because in such a system the whole is not necessarily *more* in every dimension than the part. It is possible for the more total satisfaction to be preferred though possessing less violence or facility of feeling, because the logic of the desires works towards removing contradictions between their objects as much as possible. But intensity and facility of enjoyment may remain on the side of the partial excitement. And if intensity of absorption

¹The tendency to assert any superiority in the form of a quantity of the nearest measurable element is so enormously strong that we cannot be surprised at the difficulty which the very greatest thinkers have in resisting it. Plato's famous argument, *Rep.* ix., is brought to a numerical result, though, as I hold, by this very fact he shows that he makes light of the quantitative shape.

seems in a sense to be rather on the side of the great tragedy or grave enterprise, still this intensity, stirring up all the paradoxes of our being from its foundations, need not be *primâ facie* an intensity of pleasure. There is also the point that any one who does not know pain has plainly omitted a great range of experience. It must surely be in some sense included in a complete satisfaction.

No doubt there is a tendency for elements which appear to be sacrificed in the intermediate grades of perfection to be restored as perfection is approached. What is a loss, and how far perfection can involve what to us would seem a "loss," is a most difficult problem, both in metaphysic and in such sciences as æsthetic. But it seems clear, as indeed the author's theory most emphatically demands, that we cannot exclude all transformation of common experience in the higher grades of perfection on the ground that it would involve a loss. And if so—if for example the world of sensation must be sacrificed in ultimate reality—there can be no general reason why intensity or quantity of pleasure should persist in such a way as to merit the names we give them.

It seems to follow that in some form or degree, after all has been said that can be said for the unity of body and mind, it will be necessary to rehabilitate the distinction between bodily or relatively partial, and spiritual or relatively total, satisfactions. A pleasure in which the bodily system as such is harmoniously excited, as in a game or sport at its best, must be fundamentally different from a far-reaching emotion in which the body is but secondarily aroused, as in reflexion on the triumph of a great moral or political cause. If it were possible that pleasure, in the direct and simple sense, could be proved proportional to the participation of the body in any activity, and not to the range of objective harmony signified to the intelligence through its activity (*e.g.* through a certain group of judgments or perceptions) we should have a theory which would come near to fitting the facts of introspection and of ethical and æsthetic analysis. Pleasure would then be a concomitant of satisfaction, but not simply proportional to it. The equivalent of pleasure in ultimate reality would not be annihilated by such a doctrine, for the body and all its feelings plainly must be represented there.

(To be continued.)

IV.—DISCUSSION.

IN THE MATTER OF PERSONAL IDEALISM.

THE present article takes its occasion from two very different events—the review of my *Limits of Evolution* by Mr. McTaggart in the July number of *MIND*, and the publication, soon afterwards, of the volume entitled *Personal Idealism*, by eight members of the University of Oxford. By the former, I am moved to say some things that I now discover to be very much needed for making my own position in philosophy clearer than my reviewer seems to have found it; by the latter, I am stirred to express what I must frankly admit are “very mingled feelings” indeed.

As to the essays by the Oxford Eight, one whose fortune it had been to put before the public some fifteen months earlier a theory bearing the same title of “Personal Idealism” might naturally be expected to greet with lively interest the announcement of a second book under that rubric; especially, a book issuing from the English seat of philosophy justly most venerated. This lively interest I have certainly felt, and I have accordingly turned upon the contents of the new volume, not merely with curiosity, but rather with the earnest hope of finding weighty auxiliaries for views which I count to be so inwrought with our greatest human concerns. I come back from the reading, in part fortified and encouraged, but in part, I fear in greater part, surprised and disappointed. I had supposed, of course, that the cardinal features of the system of Personal Idealism would be agreed about and accepted, if the title was accepted which had been chosen for it by its author. It is the adoption of the title in spite of rejecting essentials in the system, that surprises and in some measure discomposes me: and all the more when one finds his own lines of division for the discussion, and even his own topical titles, running through the book. It is because I hope to prevent misunderstandings on the part of the public, and to forestall a confusion of ideas in presence of an identical name used to cover very different conceptions, dealt with, above all, by very different methods, that I am prompted to comment on the Oxford volume, and to point out some of the more important divergencies between its conception of Idealism and that which I would call Personal.

That the book has great worth of matter, and will have much weight in the doctrinal controversy that is now upon us, follows of course from the known training and culture of its writers. In many regards, those who are in earnest about a polemic against the current anti-personal philosophies, monisms of one sort or another, may unquestionably rejoice in its courageous, outspoken, and resourceful assault upon Naturalism and Absolutism alike. And if one were to decide upon the philosophical meaning of a movement solely by the general aim of it, in disregard of its method, there would be little or nothing in the programme set forth by the Oxford Eight to which any idealist could demur. "The reality of human freedom, the limitations of the evolutionary hypothesis, the validity of the moral valuation, and the justification of that working enthusiasm for ideals which Naturalism . . . must deride as a generous illusion"—this unquestionably sums up well the cause for which every idealist works; nor could anything much better express the object with which my own volume was prepared. But one doesn't become an idealist simply by attachment to ideals, or by opposition to those aspects of Naturalism which assail the credit of ideals; otherwise many an empiricist, many a positivist even, might be called an idealist, and such a persistent railer at Idealism and all its ways as Prof. James might still rank as an idealist of idealists. Idealism is constituted by the *metaphysical* value it sets upon ideals, not by the æsthetic or the ethical, and rather by its *method* of putting them on the throne of things than by the mere intent to have them there. It is always distinct from Mysticism (which at the core is Emotionalism), and still more from Voluntarism. Its method is, at bottom, to vindicate the human ideals by showing them to be not merely ideals but realities, and to effect this by exhibiting conscious being as the only absolute reality; this, again, it aims to accomplish by setting the reality of conscious being in the only transsubjective aspect thereof, namely, in intelligence.

So the fact comes about that Idealism gets its essential character from its discovery that intelligent certainty depends on such an interpretation of reality as makes the knowledge of reality by the spontaneous light of intelligence conceivable; in short, that Idealism is necessarily Rationalism, or implies an apriorist Theory of Knowledge. No sort of Experientialism, so far as it is consistent, can rightly be called Idealism. Voluntarism, emotive Mysticism, it readily may be, but then it is simply Subjectivism; and if it be taken in cognitive terms, it cannot get beyond Sensationism, unable as it is to provide for any changeless and universal ideas with which to organise experiences into objects that are inalterably the same for all subjects and therefore abidingly real. Not even such a theory as Berkeley's (to which one of the eight essayists appears to hold, with some added helps from Kant) can be consistently called Idealism; for though it teaches that there is an immutable principle at the basis of our experiences, namely the

operation of the eternal ideas in the Divine intelligence, controlling God's communication of sensations to us, yet the assumption of this Divine Mind is unwarranted by the strict Experientialism from which the theory takes its departure.

One might have supposed that all this was settled beforehand, from the time of Locke. But in spite of its title, we find in the Oxford volume Experientialism running at large and everywhere: we find, in fact, (1) empiristic epistemology, (2) an organised new assault upon *a priori* cognitions, (3) a voluntarism of the most pronounced order, (4) ethical mysticism combating the mysticism of the intellect, and, finally, (5) a quasi-personalism resting upon the wholly experiential and purely temporal existence of conscious "individuals" added as a society to his own eternal being by the creative fiat of God. In short, not a single trait of *systematic* Idealism is present; the heart of real individuality, of real personality, is not reached, nay, even the serious attempt to reach it is foregone; yet the whole is brought under the name of Personal Idealism. The force of misnomer could hardly farther go.

One good, however, we shall in all probability reap out of the issuance from Oxford of a co-operative book with this title, and with the contents embraced: the attention of all the thoughtful in the English-speaking world, and even far beyond it, will now surely be drawn to the vital questions involved. Thence it may be hoped that the genuine idealistic implications of freedom, of evolutionary limits, of valid moral valuation, and of justified enthusiasm for the ideal, will more and more clearly come into view. Not until this occurs, certainly, shall we get finally rid of those plausible makeshifts in the way of philosophy that leave our chief ideal interests still at risk, and so only serve to prolong the weary procession of philosophic disputes.

But I must pass on to deal more directly with my own attempt at contributing to this idealistic quest, and with Mr. McTaggart's very suggestive review of my book. I am much indebted to my reviewer for the care and the penetration with which he has considered my theory; and yet I notice some important respects in which he has failed to take my meaning. These I must set forth with all possible clearness, in the hope of preventing further misunderstanding; and then I shall have to reply to the objections which he raises (or, perhaps rather, the difficulties which he suggests) in connexion with my view.

I.

Judging by his other published writings, as well as by his review, I may fairly assume that Mr. McTaggart is in agreement with me in holding to an idealistic Pluralism, an eternal Society of many minds, each absolutely real. It is well to note, in setting out to comment on his criticisms, that there *is* a head under which his

views and mine might be correctly brought into collocation with the views of our Oxford colleagues, with those of Prof. James, and even with those of more pronounced individualists,—I mean the head of Pluralism : in one way or another, we all hold out for manifold realities that are all alike indisputable. But only some of us set this Pluralism forth by an idealistic method, and hence arrive at what we call the "eternity" of the many minds. By this we mean simply their absolute reality, or the self-based, self-active nature of their being,—nothing else at all, except as something else may be implied by this absoluteness ; least of all, do we mean merely the everlastingness, their existence "from all eternity," as the common saying is. Our doctrine has nothing whatever to do with the superstition, born of fancy, about pre-existence. In this matter I suppose Mr. McTaggart to be in entire accord with me, and I am therefore somewhat surprised to note in his review certain misapprehensions of my position. These I will now specify.

(1) He speaks of my doctrine that only an eternal being can really be free, as a "remark". This language is seriously misleading ; the reader must surely get from it the impression that my statement of this view is merely incidental and by-the-way. On the contrary, it is in fact basic and central to the whole theory of my book, is developed with emphatic prominence, and is argued out with much detail. (See my pp. 326-343.)

(2) A more important misapprehension is this : "It [the system of Personal Idealism] offers a God of whom personality, morality, and affection can reasonably be predicated, since, though perfect, he is finite. (I am not sure if Dr. Howison would accept the word finite, but in effect, it seems to me, he holds God to be finite, since he makes him one of a community of spirits, each of whom has 'a reality as inexpugnable as his own'.)" Indeed I do not accept the word, nor can. I am surprised that my real view in this matter should have escaped Mr. McTaggart. So far from holding God to be finite, I hold, and in my book clearly teach, that all minds are infinite (in the true qualitative sense of the word), and God pre-eminently so. (See my pp. 330 *seq.*, 363, and 373). Eternity, self-existence, self-activity, freedom, and infinity, are to me all interchangeable terms, and are so treated wherever they turn up in the course of my book. My reviewer falls into a *non sequitur* when he concludes that I make God finite because I make him one of a community of spirits, each absolutely real ; not God's finitude, but his definiteness, is what follows from that. This confusion of the definite with the finite is very common, and is the explanation of two tendencies in sceptical thinking—the tendency to deny the personality of God, whose infinity is supposed to mean his utter indefiniteness, and the tendency, in recoil from the former, to assert God's finitude in order to save his personality, which of course must be definite. But the true infinite, as distinguished from the pseudo-infinite, the infinite of quality in

contrast to the infinite of quantity, is entirely definite; more definite, indeed, than any finite can be.

(3) Mr. McTaggart misconstrues my various statements about the imperfection in all spirits other than God. He supposes me to hold this imperfection to be incompatible with their being perfect in any sense whatever, and he mildly blames me for overlooking the classic distinction between the view *sub specie æterni* and the view *sub specie temporis*, whereby the seeming contradiction involved in an imperfect-perfect might be reconciled. But my actual doctrine about the spirits other than God is exactly his own. "*Sub specie æternitatis*, every self is perfect; *sub specie temporis*, it is progressing towards a perfection as yet unattained," he says. And the very quotation from me on which he bases his criticism (see my p. 363) expresses this, almost in open words: "The personality of every soul lies precisely in the relation . . . between that genuine infinity (self-activity) which marks its organising essence, and the finitude . . . to which the infinity [only another name for perfection] subjects itself in defining itself from God." So, too, though more explicitly, when I say (p. 374): "The perfection of the 'creature' lies just in this never-ending *process* of victory. . . . Thus its life shows its peculiar perfection by the mode in which . . . it surely, though slowly and with heavy toil, heals its own inherent wound." And yet again: "The infinity of the 'creature,' the infinity that embosoms finitude and evermore raises this toward likeness with the eternal".

There are sundry other passages in my concluding essay that affirm the distinction drawn by Mr. McTaggart between the complete self-adequacy of the spirit as a whole in eternity and the inadequacy of it as broken up in a time-process and engaged in a perpetual struggle to attain conformity with that eternal wholeness. In fact this distinction furnishes the whole basis for my reply in that essay to Prof. James's *Dilemma of Determinism*. I am really quite at one with Mr. McTaggart in what he says about the perfection of all eternal beings, in so far as they are eternal. I have usually avoided the explicit use of the word, because it is in many contexts misleading, and also because the too free use of it would engender prejudice in most readers, thus preventing the proper appreciation of the arguments offered for the world of real freedom. That world as I intend it, and habitually think it, answers to the principles of unity and harmony quite as Mr. McTaggart suggests.

Accordingly, my argument for the existence of God is not reached by those of his suggested objections which are founded on his assumption that I hold all minds but God to be utterly and totally imperfect, without any aspect of perfection at all. On the contrary, I hold, with him, that all eternal beings are perfect, each in its own way. But the way of God, I maintain, is the way of *absolute* perfection, which eternally excludes defect; whereas the way of every other mind is the way that includes defect, comes (or may come) to include sin, and only exhibits its perfection in its power to return to wholeness through the process of time.

That I have chiefly dwelt on perfection and imperfection as respectively the attributes of God and of the non-divine minds, without entering into the subtle distinction between *kinds* of perfection, is indeed a fact, but it should be regarded as a rhetorical rather than a philosophical procedure. That is to say, my book was aimed at readers of general cultivation rather than at metaphysical experts, and so I thought I should carry my new argument for the reality of God more surely home if I kept out of the region of the supersubtile, and relied upon those aspects of the difference between God and other minds which are the most obvious. The point of my argument, in this connexion, is that in God there is a perfection in which there is no imperfection at all, while in every other mind imperfection is present, though undergoing an endless process of cancellation. Of course, subtly analysed, this last means a species of perfection. But again my point is, that the sole possible basis for species in perfection is, primarily, the contrast between absolute perfection (excludent of imperfection) and perfection that embraces and proceeds to reduce imperfection; and, next, the manifold modes of which this second species is susceptible, resting on what I have called (see my pp. 363, 374) the "rate" of adjustment between the infinite (or perfect) and the finite (or defective) aspects of the mental being.

(4) In connexion with my argument for the existence of God, Mr. McTaggart makes this statement: "Among the different grades [of intelligent beings] which . . . are really possible . . . Dr. Howison assumes that the highest grade of all—that of the ideal Type—is one, and consequently that a being exists who realises the Type. So far as I can see, he does not attempt to prove this." Just what Mr. McTaggart means by his word "this," I am in some doubt—whether he is referring to my "assuming" that the ideal Type is one of the different grades of being that are really possible, or to my taking as a direct consequence of this the actual existence of the ideal Type.

As for the first of these matters, it is not true that I *assume* the ideal Type to be one of the really possible intelligences; on the contrary, I show (see my pp. 353-355) that this Supreme Instance of the intelligent nature present in all possible minds is the one salient certainty in our conception of the whole series, *when we view the series as conceivable simply*: whatever we can *not* tell about the series, or the numbers in it, what we *do* see, and see clearly, is that it must contain, as a possibility, this Type; this I treat as the implication in the entire process of definition by which other members in the series are determined.

And as for the second point, I do not conclude to the actual existence of the divine Type *directly* from its ascertained possibility; that would be merely repeating the thrice-buried Ontologic Proof over again, and the futility of that I have dwelt upon in my pp. 357-358. The identification of the divine Type as a necessary member of the *conceivable* series proves only this: that there is a

necessary connexion between the *idea* of every mind and the *idea* of God,—no mind can define itself except in terms of God. The argument to the actual reality of God is then completed by resorting to each mind's certainty of its own actual existence through dialectic verification: to attempt to posit the contrary, only ends in positing the self again. From this the actual existence of God follows, because the actual existence of the self must carry the existence of whatever the idea of the self synthetically involves. I can hardly imagine how my reviewer can have read pp. 356-359 of my book, and still say that I make no attempt to prove the actual existence of God as the ideal Type of all the really possible spirits; nor how he can still set it down that I *assume* the ideal Type to be one of the series of really possible beings, "and consequently that a being exists who realises the Type".

II.

But enough of these misapprehensions. I must now turn to sundry difficulties that Mr. McTaggart finds with some of the cardinal conceptions in the theory which my book illustrates, or else with my method of advocating them.

(1) He complains that after going closely with Kant to a certain point, I then suddenly separate myself,—“abruptly,” as he says. By this he appears to mean my rejection of Kant's restriction of all our cognition to phenomena and denial of our power to reject noumena. He implies that I nowhere give any reasons for rejecting Kant's criticisms on the Paralogism of Pure Reason, but go on to maintain that Pure Reason can know that the self exists, and exists eternally, simply ignoring these celebrated criticisms. It is a fact, of course, that I have not felt it needful to reply in detail to the various branches of Kant's agnostic doctrine, and especially not to his assault upon the possibility of proving theoretically the freedom and the immortality of the self. I have chosen to rely, rather, on a general refutation of the agnostic *motif*, which I have supplied in my first essay; and I have relied more especially on the self-refutation of Kantian agnosticism by its own inner dialectical dissolution, which I have traced out in the fourth part of my third essay. These very essential parts of my general argumentation, my reviewer appears to have quite overlooked. No reader who omits them will properly understand the argumentative procedure on which I rest my case in the seven essays taken together.

Besides, I have throughout assumed readers will see that Kant's agnostic restrictions are anticipated, provided for, and rendered inapplicable by the plain implications of the fact of a *a priori* cognition itself, when that is once clearly established and clearly understood; and this fact I have explicitly argued out, in two different places in my volume—in the first essay, and again in the sixth. Then,

too, I have relied on the plain force of the essentially *social* nature of the self-defining consciousness to lead my readers to see how irrelevant Kant's agnostic tenets are. (See, particularly, my pp. 351-353, and cf. pp. 173-175.) That is to say, the Kantian agnosticism is annulled, so far at least as concerns the certainty of the existence, even the noumenal or eternal existence, of the self. In fact, however, my reviewer is a trifle out in saying I depart from Kant on this point, for Kant himself never supposed that *this* was unknown or unknowable: what was unknowable was, not the *existence*, but the *nature* of the noumenon. If nowhere else, then at all events in the *Prolegomena*, Kant declares unmistakably that the existence of selves as *Dinge an sich* is a known certainty. "That there are no *Dinge an sich*," he says in substance, "is absurd". (Cf. the *Prolegomena passim*, but especially in §57.)

(2) A more serious complaint is that which Mr. McTaggart makes that my reasons for treating the Categories as applicable to the self, when I refuse to describe it in terms of Sense Forms, are "not brought out anywhere in the book". This fault, if it is a fault, I have to confess. Within the limits of the brief volume I could not compress everything pertaining to a complete vindication of my general view. In particular, Mr. McTaggart's centrally pertinent question—Why are not the Categories in exactly the same position as Time, as to being necessarily transcended by the noumenal self?—could only be answered after a complete re-examination, going to the foundations, of the whole problem of epistemology. This would need to be taken up along Kant's own lines, and followed to the point where (at the end of the *Transcendental Analytic*) one gets into the position to show that, and just why, Kant has failed to establish the *objective* character of even natural science. It would then appear that, in order to give really objective value to *a priori* syntheses in Space and Time, we must combine a *pure* use of the Categories—a use unmixed with Sense Forms—with their use as "schematised" with the help of these Forms. Thus we should learn that there is no possible escape from the transcendent use of the Categories even when we attempt to employ them only transcendently.

But not only did I feel that this epistemological inquiry was at once too long and too subtle for the public to which I chiefly addressed my book; I was also, in the case of more expert readers, relying upon a previous warning as to the general path the inquiry must follow, which I had given in my contribution to the volume entitled *The Conception of God*, at pp. 124-127. Still, Mr. McTaggart is quite right in pointing out that all this needs to be done in full detail before one can claim to have made a proof of Personal Idealism clear of *all* queries. And this I hope some day yet to accomplish.

(3) My reviewer finds a "weakness" in that part of my argument concerning the existence of God which aims at showing God's soleness (monotheism), in opposition to the charge of "polytheism"

or "apeirotheism" urged against my proposition that all selves coexist with God in eternity. He thinks the argument assumes "that beings who are equally perfect could not be different from one another". But it does *not* assume this; as I have already shown above, when clearing up the misapprehension about perfection and imperfection as applicable to the selves other than God. It does assume, however, that no beings who are *absolutely* perfect can be different, that is, none that are perfect without immixture of imperfection, and that are wholly supratemporal in their being. The conjunction of this unmixed perfection with eternity is what constitutes the proof for the soleness of God. Mr. McTaggart fails to get the force of it, I think, because he silently omits this divine *differentia* before the word "perfect" as I use it of God. And thus contrasting God and other selves as the Perfect and the unrelieved imperfect, he draws the unwarrantable conclusion about "superiority" and "inferiority" which he seems to dislike. But I intend no relation of this sort between God and the souls. They are *different*, and *unchangeably* different; they are even different *in species*, God being perfection eternally fulfilled, the other selves having a time-world of unfulfilment and having to carry it on toward the goal of fulfilment evermore. Thus the difference between them is in this reference permanent,—to answer my reviewer's question on this point.

(4) Finally, Mr. McTaggart objects to my calling this sole mind possessing absolute and eternal perfection God. He insists that the traditional usage shall be absolutely venerated, which makes God the name of one only self-existent Being, who brings all other beings into existence by creation *ex nihilo*. Here I am quite unable to agree with him. I not only do not think that this solitude of self-existence, conjoined with this universal efficient causality, is the central and essential thing in the traditional religious thought of Christendom, but I am sure that the most spiritually minded Christians would at once declare that it is not such; they would say, on the contrary, that the essential thing in the being of God is his holiness, justice, and infinite love. Now, what I point out is, not only that the function of creation, taken literally, is unessential to this moral perfection of God, but that it is in hopeless contradiction with it; and that the obscurely felt fact of this contradiction, a feeling growing ever more clear as the Christian consciousness grows more sure of itself, is at the bottom of all that restlessness in the region of Christian theology which we all know so well, and which is the characteristic fact in the later Christian world.

To remove the name of God from the clarified and purified conception of the eternal Ideal Type, would be to do violence, inexcusable affront, to the deepest and truest element in the historic religious consciousness. I feel the strongest assurance that my new interpretation of the name of God is the genuine fulfilment of the highest and profoundest prescience in the historic religious

life. What offends us in the Spinozistic or other monistic appropriations of the name God is the evident absence from their Absolute of all the essential moral qualities. In *these* it is that true Deity lies ; and all God's metaphysical attributes must be keyed up to them ; not one of these "natural" attributes dare be construed in any way that conflicts with the eternal moral essence. If they have been so construed historically (as indeed they have), genuine theology requires that God's conception shall be relieved of these errors, in order that his true nature may stand revealed as it is.

G. H. HOWISON.

NOTE IN REPLY TO MR. A. E. TAYLOR.

In publishing my article on "The Later Ontology of Plato" (MIND, N.S., No. 41) I was partly actuated by a hope that the views therein expressed might attract the attention of scholars better acquainted than I am with the minutiae of Platonic criticism and thus lead to a reconsideration of the issues involved. They might agree with me or they might not; but at any rate there was a chance of new light being thrown on what is perhaps the most fascinating problem connected with ancient philosophy. I therefore welcome with pleasure the reappearance of Mr. A. E. Taylor in a field where he has already displayed his competence, and although my interpretation of the *Timæus* has not the advantage of his support I shall look forward with interest to the article in which it is his intention to controvert it.

Meantime as Mr. Taylor has tried to discredit me in public estimation by citing a number of alleged inaccuracies and oversights from the article referred to I feel bound to examine the charges *seriatim*, not taking them in the order of their occurrence, but, for greater convenience, in the historical order of the opinions to which they relate.

Beginning then with *Parmenides*, I am censured for making the "remarkable assertion" that he identified space with pure reason (MIND, N.S., No. 45, On the First Part of Plato's *Parmenides*, p. 2). Several propositions are involved in the obnoxious sentence, and I cannot tell to which of them Mr. Taylor objects. Am I wrong in translating that operation which Parmenides calls *νοεῖν* by "pure reason"? or in assuming that he identified *νοεῖν* with *εἶναι*? or that his description of Being exactly fits space? If I err, I err in good company, for Gomperz represents *Parmenides* as holding that reality (*das Reale*) is both extended and thinking.¹ But as the Eleatic master altogether denied plurality and distinction within the sphere of Being this was to identify thought with extension, or space with reason, for in this instance the words may be taken as equivalent; although if we were talking about Spinoza it would be most dangerous to do so. And Schwegler, Erdmann, and Windelband seem to be of the same opinion.

Mr. Taylor finds me speaking of the unanimous tradition of Greek philosophy that like can only be known by like in a way that shows my forgetfulness of the "rival doctrine of perception by opposites hinted at by Heracleitus and elaborately worked out by Anaxagoras" (*ibid.*). I presume he is referring to a fragment of

¹ *Griechische Denker*, i., p. 145.

Theophrastus quoted in Diels' *Doxographi*, pp. 499 sqq. If so I must remind him that the opinions given there relate not to knowledge but to sensation (*αἰσθήσεις*). It is of no importance what views Heraclitus held about the senses and their mode of action. We are only concerned about his theory of knowledge, and as to that we have the evidence of Aristotle, who tells us in the *De Animā* that according to him the soul is, like the universe, in a state of flux, "for the moving is known by the moving" (*τὸ δὲ κινούμενον κινουμένῳ γινώσκεισθαι*).¹ And this is confirmed by the substantially equivalent statement of other authorities that Heraclitus represented the soul as fiery. Moreover we have it on his own direct authority that "the dry soul is the wisest and best"—wisest because most like the elemental fire. And drink makes men foolish by moistening their souls, bringing them, that is to say, into a state opposite to the reality of things. Now on Mr. Taylor's theory of Heracliteanism true wisdom would consist in following the prescription of the hermit-sage, and having not only "some beer" but a good deal of it.

With Anaxagoras the case is rather different, and I must confess that I overlooked him. He affirms that the cosmic Nous is unlike everything and knows everything. But Aristotle tells us that in taking this view he stood alone, and that he neither gives nor suggests any explanation as to how this knowledge is obtained.² And even this exception is only partial. For Anaxagoras would not have denied that we know the cosmic Nous as well as the scattered portions of it in other men, in animals, and in plants by the like nous in ourselves. So far as knowledge in the Greek sense goes there is no question of a school, nor of an elaborately worked out doctrine of generation by opposites. Diogenes of Apollonia, who seems to have set up a fashionable Anaxagorean school at Athens, abandoned this part of the master's theory, and by identifying the Nous with air restored the principle of cognition by likeness.

It appears then that by writing "almost unanimous" for "unanimous" my statement would be made strictly accurate. Mr. Taylor, I suspect, would have to give the printer much more trouble if he tried to bring his criticism into accordance with fact and logic.³

I remarked that Plato would not have agreed with Descartes in holding that the idea of perfection involves that of existence; and Mr. Taylor "entirely fails to see how this is to be reconciled with" a passage he quotes from the *Sophistes* (p. 1). I have studied the passage long and earnestly but "entirely fail to see" what it has

¹ 405 a, 27.

² *Loc cit.*, b., 20.

³ While I am about it, I wish to take this opportunity of correcting another regrettable inaccuracy. In the article referred to I quoted Plato as saying that he "had never met a mathematician who could reason" (p. 39). I should have written with Jowett "hardly ever" (*μᾶλα γέ τινας ἀλίγοι*. *Rep.*, 531 E).

to do with the question. Plato is assuming—rather tentatively and provisionally as it seems to me, but that does not matter—that whatever exists, exists wholly (γέγονεν ὅλον). It is “in itself complete,” so to speak; it either is or is not. Even Becoming—whatever a Greek Hegel might say to the contrary—verily *is*, and is not half in and half out of existence. Let Mr. Taylor if he likes call this existing perfectly, and let him say that with Plato the idea of existence involves the idea of perfection. But this—which sounds rather Spinozistic—is not what I mean by perfection, nor what Descartes meant. This can be easily proved. No fact in the history of philosophy is more certain or better known than that Descartes was quite sure of his own existence. It is equally certain, though less well known, that he was also sure of his own imperfection, and on the same evidence, namely, that he doubted. Now if ὅλον means what Mr. Taylor seems to think it means Descartes should have thought himself perfect, at least if he agreed with Plato. But I submit that he took perfect in an all round sense, including above all moral excellence. And it is in that sense that I predicate perfection of the idea of the Good, which according to Plato so far from involving the idea of existence actually excludes it. If Mr. Taylor were right, the passage from the *Sophistes* would imply a belief on Plato's part that the Athenian democracy was perfect, which, as another Greek writer would say, is absurd.

And now I come to the most important allegation of all, which is that I wrote my article in such haste as to overlook a passage in the *Timæus* which Mr. Taylor considers “the strongest and most emphatic declaration of the ‘separation’ in some sense or other of Idea and sensible thing to be met with in the whole of the dialogues.” For in his opinion this passage contradicts what I call Plato's refusal to acknowledge an independent and isolated existence of the Ideas. “In some sense or other” is a very convenient phrase; and I wish for the sake of variety it might replace the eternal “more or less” of the cultured classes. Any sense you like except the crude realism of an independent and isolated existence. And my point is that Plato by making οὐσία a product of ταὐτόν and διάφορον—Identity and Difference—does refuse such existence to the Idea in its isolation. So far, if I rightly understand them, I am in agreement with Mr. Archer Hind and Dr. Jackson, whom I suppose Mr. Taylor would not accuse of writing hastily or of ignoring decisive passages. The chief difference between my interpretation and theirs is that they take the world-soul in a purely spiritual sense, while I take it in a semi-materialistic or dynamic sense.

Mr. Taylor seems rather displeased with me for not referring to his former articles on the *Parmenides*. As well as I can remember I read them twice through, but, doubtless owing to my own stupidity, they seemed to me considerably more obscure than the dialogue they were supposed to elucidate. And his new paper leaves me in the same bewildered state. But I cannot avoid an

impression that there must be something wrong about a method which explains Plato by conceptions so entirely outside his ken as equations to curves. And this impression is strengthened when I think of Mr. Taylor's marvellous commentary on Zeno's argument about the *ὅμοια καὶ ἀνόμοια*. How sober poor Maguire seems in comparison! Since Molière's time were ever so many things got out of two words! The proverbial relationship between mice and mountains seems in this instance to be reversed. Mr. Taylor would have been an excellent pupil for Cratylus, the Heracleitean who lectured in dumb show. He would have extracted far more from the movements of that sage's fingers than ever Puff got out of Lord Burleigh's shake of the head.

ALFRED W. BENN.

V.—CRITICAL NOTICES.

Völkerpsychologie. Eine Untersuchung der Entwicklungsgesetze von Sprache, Mythos und Sitte. Von WILHELM WUNDT.
Erster Band: *Die Sprache.*

ASSUREDLY the theme of this first volume of Prof. Wundt's monumental work is profoundly interesting. We commenced the study of it with a very real enthusiasm. Here at last was a systematic treatment of linguistic material from the psychological point of view. Here we should find a vast array of facts, countless and diverse, culled from all possible sources, compared with one another, articulated upon the continuous thread of psycho-genetic explanation. Instead of mere *dissecta membra*, viewed from the outside, instead of the empirical classifications of the comparative philologist, we should have exhibited to us the internal mechanism, the causal connexions; linguistic forms would be shown to be the results of mental process; a new insight into mental process would be gained from the comprehensive study of linguistic forms. Nothing less, we imagined, could satisfy the psychologist bent on giving a systematic account of the evolution of language than a survey of all possible means of expression, including the language of signs. And since the evidence for psycho-genetic theory is largely to be found in comparative philology, the marshalling of linguistic facts should go hand in hand with theoretical exposition. We expected that Prof. Wundt's work would be, in a very real sense, at once a philological treatise for psychologists, and a psychological treatise for students of linguistics. Such a book would be the labour of a life-time. Wundt's work is but an incident in one of the busiest learned careers on record. There is far too much theory, and too little fact to please us. The facts are quoted merely as illustrations of theories, not as proofs of them, and no one but a competent philologist could judge whether the illustrations are fairly chosen or not. The same instances from the same languages are apt to recur wearisomely often. The references to primitive languages are much too scanty and vague. For the partial disappointment we are bound to confess to, we may be to blame. We may have pitched our expectations too high; and assuredly an author has a

right to his own conception of the scope of his task. But Prof. Wundt offers little encouragement to his readers. It is a thorny path that leads to his inner shrine, and would-be disciples tread it with bleeding feet. Nearly 1,300 pages of pale German ink on the most exasperating German glazed paper—the physical discomfort of reading them might easily damp the most ardent enthusiasm!

So far as it goes, the first part of this volume is in many ways admirable. It maps out the development of means of expression from the natural expression of the emotions, through gesture-language, up to articulate speech; and thanks to the insight gained into the processes involved in the most primitive methods of expression, Wundt is able to offer most suggestive hypotheses on many interesting problems of the evolution of spoken sounds and the formation of words. The general account of the expression of the emotions is full and good. In view of recent sphygmographic and plethysmographic work in Germany and in America it would certainly appear that his treatment of the vasomotor intensity-symptoms is much too simple and definite. The Chapter on gesture-language, in which he examines one after another the sign-systems of the deaf-mutes, whether natural or artificial, the gestures of savages, of Cistercian monks, and of European peoples—such as the Neapolitans, is of the highest interest. Prof. Wundt is at his best as an expositor; and this chapter is a model of exposition. He divides gestures into two fundamental classes: indicative (*hinweisen*) and representative (*darstellen*) which latter species includes three classes: the imitative (*nachbilden*) the significant (*mitbezeichnen*) and the symbolic. The first are a plastic representation of the whole object or of some striking feature of the object, the second designate the object by means of some one of its qualities or marks, the third are either direct or indirect symbols of ideas. All these kinds of gestures are admirably exhibited as steps in a progressive development. There is nothing to add to Prof. Wundt's classification, and it may be looked upon as final. The sections on the change of meaning of gestures are also full of suggestiveness. But the section on the Syntax of gesture-language, reliable and accurate as it is, cannot be said to add anything to Dr. Tylor's account in his *Early History of Mankind*. Most unhappily, that same practical interest to which, as Wundt remarks, we have in the past been indebted for all we know of deaf-mute gesture-language, has in the last two decades prevented any addition to the material at our disposal. For the psychologist, at least, the decay of the old system of educating deaf-mutes has had disastrous effects. The natural gesture-language still exists in the home, and in the playground, if not in the class-room, but there is scarce any one willing or competent to observe it. Wundt notes the analogies between deaf-mute gesture syntax, and the syntax of Amerind gesture-language as described by Mallery; shows the development of gesture-language in general out of

emotional pantomime, and connects it with the primitive forms of plastic art, with picture-writing in especial. But although recognising to the full the peculiar interest of gesture-language ("Sie repräsentirt in ihrer Bildung alle Entwicklungsstufen, die das geistige Leben des Menschen überhaupt zurücklegt") he contributes nothing to the solution of any but the most general problem of its syntax, and seldom makes use of it to throw light upon cognate problems of the syntax of speech. It would surely have been interesting to compare the structure of Amerind speech with Amerind gesture, or the structure of deaf-mute gesture language with that of primitive savage tongues. The additional insight into the mental processes involved would assuredly have been worth even a good deal of extra trouble.

Chapter iii. deals with vocal sounds, from the animal's cry of pain—or rage, which is an automatic expression of emotion, devoid, in the first instance, at least, of any objective significance—through the songs of birds to the articulate and purposive speech of man. He distinguishes three stages in the development of the child's speech. First come inarticulate cries, next articulate but meaningless sounds, finally articulate sounds which are intended to convey a meaning to other people. Prof. Wundt will not allow that children ever invent their own speech. This view, assuredly widespread among nurses and mothers, and even psychologists, is a result, he believes, of the common illusion "dass der Mensch von Hause aus ein Wesen sei, das in Seinen Handlungen von logischen Reflexionen bestimmt werde". And we fully agree with him that such an intellectualism is barren in principle and wrong in fact. But so to agree is to reject some special theory as to the process of word-invention, not to declare the impossibility of that invention itself. Wundt quotes several instances of such alleged word-invention from Taine, Sully, Darwin, Miss Moore, and he thinks they can all be explained by direct imitation of already existent words. This point obviously admits of discussion, and can only be settled by the examination, not of half a dozen instances, but of a large mass of facts. *A priori*, there seems no reason why the only sounds imitable by the child should be the sounds of the human voice. Whether or not onomatopœia does occur in the early months of life is a question which still awaits solution, and it is assuredly worth careful study. As for the alleged invention not of single words but of a whole language, Wundt is even more sceptical. These tales "sind wohl ein für allemal in das Gebiet der Fabel zu verweisen". He sums up his general view in a pithy sentence: "The child's speech is a creation of his environment, in which he is but a passive co-labourer" (p. 296). Passing now to the natural sounds of developed language, Wundt divides them into primary and secondary interjections, both of them direct emotional expressions devoid of grammatical form; he shows the connexion between secondary interjections (such as *me hercle! Good heavens! etc.*)

and the Vocative, and Imperative; between primary interjections (such as *ah! weh! heu!*) and certain verbs (as *to howl*) or nouns (as *father* and *mother*: he follows Buschmann in rejecting the theory that these words are formed from conceptual roots). He next passes in review the instances of imitative sounds in developed speech. They fall into two main classes: words that bear an immediate resemblance to objective sounds (*cuckoo*, *to tick*), and words that bear an auditory resemblance to some visible or tangible object. German is particularly wealthy in such instances; but surely German is not the only language able to throw light upon a process which Wundt regards as one of the most primitive in the building-up of speech. Surely this is a case in which we have a right to insist upon a much wider survey of linguistic material than a mere parcel of facts from a highly developed tongue! Wundt insists upon the continuity of the evolution of language (p. 314 *et passim*). Well and good, yet it is but one more reason for a comprehensive study of languages belonging to all possible stages of development. He rejects the root-theory of word-formation, and considers roots to be mere grammatical abstractions; that is a question no argument about which is anything but waste of breath, unless it be supported by corroborative evidence. This evidence may be familiar to the philologist, but it is not to the student of psychology, and Wundt makes no serious attempt to enlighten us. Again in discussing the second class of imitative sounds—that of imitation of some non-auditory object by means of an articulated sound—it would have been most instructive to study not merely the traditional expressions of literary speech, but that large mass of new formations, the slang of the populace; for here we have indeed speech in the making. Of all this material, Wundt uses not a scrap. What now is the exact nature of the similarity between word and object in this second class of imitative sounds? By what process do they come into existence? He answers that it is not in the sound itself, but in the movements of articulation upon which its production depends, that we must look for the essential factor. “Die Beziehung zwischen Laut und Bewegung kann keine im voraus gewollte, sondern nur eine nachträglich entstandene sein. . . . Unmittelbar sind es nicht die Laute, sondern die Lautbewegungen, die durch den äusseren Eindruck triebartig ausgelöst werden” (p. 321). In short, these movements of articulation are to be regarded as belonging to the class of imitative gestures (*nachbildende geberde*). And he even asserts (p. 323) that the source of the apparent similarity between words such as *bummeln*, *torkeln*, *kribbeln*, and the actions they denote, is not the sound, but the movement of the tongue and the lips. Surely this is a most paradoxical theory. Is our perception of the movements of articulation in and for themselves so very fine as Wundt supposes? So far as my own introspection goes, this is not true. Muscular sensation and auditory image seem, in my own case, to

be indissolubly combined,¹ and the former has no meaning apart from the latter. And when we remember how very defective is the articulation of the totally deaf, we feel inclined to assume that this connexion is universal. He assumes too that all these processes take place beneath the level of free ideas. This again is an extremely doubtful point. Moreover, had he borne in mind a number of other instances—*e.g.*, modern slang words—which he does not quote, I doubt whether he could have maintained for a moment that the theory proposed was of universal validity. Nor does it really apply to a certain group of words which he discusses under the same head. Thus (p. 324) "Organs or actions which are connected with the production of vocal sounds, are often designated by means of words, in the articulation of which these organs or actions play a part". Examples: *Zunge, schliesfen, blasen, Mund*, etc. . . . To bring these cases under the concept of true indicative gestures is a really brilliant inspiration. Yet it seems clear that between such words and onomatopœia—direct or indirect—there is all the difference which separates indicative from representative gestures. Wundt's treatment of natural sound-metaphors is also very suggestive.

Chapter iv. discusses the laws of sound-change, in great detail, first continuous, then discontinuous change; and examines the various explanations that have been offered of Grimm's Law. We have space only to note the general features of his treatment. He will not compromise with intellectualism in any shape or form, and denounces the teleological and æsthetic explanations as unpsychological to the core. The main principle of his own psychophysical interpretation is that in the variations of the rate of speech a *vera causa* of sound-change is to be found. He contends that the development of civilisation has been accompanied by a regular increase in this rate. He admits indeed that we can have no direct proof of this proposition, but so far at least as the Indo-Germanic languages are concerned, there are several indirect proofs: *e.g.*, the lessening of the length and cumbrousness of the written sentence, the simplification of grammatical forms, and—the analogy is instructive—the increasing rapidity of musical tempo from say Scarlatti, or Mozart, to Beethoven and Brahms. Let an aspirata be pronounced faster and faster, and it tends to become a media; similarly a media to become a tenuis. This inauguration of an 'experimental' philology is assuredly interesting in the highest degree. It deserves, and it has already received, the attention of linguistic specialists. But, accepting Wundt's assumption that the rate of speech tends to increase as man advances in civilisation, how can the hypothesis explain at once

¹ It is strange that he should overlook at this point a connexion which he fully recognises farther on. On p. 385 he speaks of the "unmittelbare Verbindung der gehörten Sprachlaute mit den Articulationsempfindungen".

the change from aspirata to media and tenuis, and the opposite and simultaneous change from tenuis to aspirata? For such is the substance of Grimm's law (as Wundt himself, indeed, has noted p. 410). Moreover, it is not at all certain that Wundt's assumption is correct. Do savages talk less rapidly than civilised men? Wundt, of course, is ready to admit the lack of any satisfactory evidence. But merely to ask the question is to realise its ambiguity. Is it the emotionally excited or the comparatively calm savage we are speaking of? The rate of speech certainly varies with the speaker's emotional states. On the other hand, the rate with which ideas follow one another does not seem necessarily to vary in direct proportion to the degree of culture. Wundt believes that it does (p. 420). Yet he makes no attempt to justify his belief by making an exhaustive analysis of the factors upon which the rate of speech depends. Practice is the only definite one mentioned by him. But it is clear that there are many others—the development of abstract ideas, the increasing complexity of meaning, the possible changes in emotional excitability, etc., etc.—which may not all tend to produce the same results. Wundt explains in the same way the mutual influence upon one another of two sounds in more or less close contact. (Regressive and progressive sound-induction.) A section upon Assimilation—the influence through association of one word upon another, closes the chapter.

Chapter v. deals with the formation of words, naturally from the psycho-physical point of view. The physiological mechanism is discussed, so too the pathological disturbances of the function of speech, aphasia, paraphasia and amnesia; there is a section on the shortcomings of the cerebral localisation theory; and the chapter includes a small treatise on the psycho-physiology of reading, on the apprehension of the spoken and written sentence. Erdmann and Dodge are hardly treated with the respect to which their careful labours are entitled, and there is nothing noteworthy in the treatment of the psychology of meaning, but the account is a useful *résumé* of the experimental work hitherto published. All this, however, belongs to the province not so much of social as of general psychology; and so it is, indeed, with the rest of this chapter, and practically the whole of the book. But for an occasional reference to imitation or tradition, we are told wonderfully little of the social factor. As a consequence of his psychological analysis of the nature of the word, Wundt finally rejects the 'realistic' theory of roots, and allows them only a conceptual validity. They are what remains when philological analysis has separated the word into its ground and its connective elements. "In the beginning was the word": "Die Annahme einer Wurzelperiode der Sprache ist ein Phantasiegebilde" (p. 559). Neologisms are next examined, and some interesting points are made with regard to such groups of words as *e.g.* *baumeln*, *bammeln*, *bimmeln*, *bummeln*, of which each seems to be derived from the previous one by a process of partial onomatopœia (p.

571). After this come word-formations through sound-reduplication, and through synthesis. Our complaint is once more of the small number of examples given. They are practically all taken from Indo-European languages, and more especially from modern German.

We have too little space left for more than the vaguest indication of the contents of the second half volume. It is divided into four chapters, the first of which treats of the different kinds of words—substantive, adjective, verb, pronoun, etc.—and their various forms (number, gender, case). The second deals with the interconnexion of words in the Sentence. The third is on the alteration of meaning of words and idioms,—and is a contribution to what Dr. Postgate would call Rhematology, and what Prof. Bréal writes about under the name of Semantics. The fourth chapter discusses the origin of Speech, and the main types of theories that have been devised to account for it. Wundt's own theory is evolutionary, and postulates the continuity of evolution. It is eclectic, and borrows from the previous theories (those of interjectional, imitative, and fortuitous vocal sounds) the undoubted facts which they erred only in selecting as the exclusive basis for a doctrine of origin. To ask whether speech or reason came first is, for Wundt, as absurd a question as that famous conundrum about the hen and the egg.

F. N. HALES.

The Varieties of Religious Experience: a Study in Human Nature. Being the Gifford Lecture on Natural Religion Delivered at Edinburgh in 1901-1902. By WILLIAM JAMES, LL.D., etc., Corresponding Member of the Institute of France and of the Royal Prussian Academy of Sciences, Professor of Philosophy at Harvard University. Longmans, Green & Co., London, New York and Bombay, 1902.

THIS is not an easy work to review. The greater part of it is taken up with records of actual religious experience, mostly of abnormal kinds—remarkable cases of conversion, of exceptional saintliness, of religious exaltation and mystic insight. That the book is one of the highest interest, that extraordinary industry and research have been employed in collecting these records from the religious literature of all ages and faiths, that Prof. James's comments upon them are characterised by all his accustomed charm of style, vivacity and open-mindedness, is unquestionable. Nor can there be any doubt that it was well worth while to undertake such a task. They will at least be valuable as materials for Psychology and Philosophy, whatever may be thought of the use which Prof. James himself makes of them. It is good that philosophers should be reminded that there are sides of human nature

and human experience which are too often undreamed of in the formal philosophy of the schools. It is well that the theologian should be compelled to recognise how ideas and experiences which he is in the habit of supposing to be peculiar to his own religion and perhaps to his own form of that religion are really, not indeed without characteristic differences and modifications but still to a large extent, common to many widely different faiths. But here we are obliged to ask what is the value of Prof. James's book, not merely as an interesting piece of literature, or even as a piece of psychological research, but as an actual contribution to Philosophy and particularly to the Philosophy of Religion.

I shall best perhaps answer this question by confining my detailed criticism to the chapter entitled "Conclusions". My space will not allow of much argument in favour of or against Prof. James's views. Prof. James would, I am sure, be the last man in the world to complain if the review on so personal a book should be somewhat personal also—a mere statement of personal impressions and appreciations rather than an elaborate discussion. I pass over the merely psychological part of Prof. James's conclusions—his mere summary of the leading characteristics of religious experience and his estimate of its partial utility and of the limitations of that utility. Against the fairness and general healthy-mindedness of his summing-up I have nothing to say. The only remark that seems called for is this—that Prof. James deals almost exclusively with abnormal and exceptional experiences. His own defence of this procedure is that the exceptional or extreme cases show more clearly than others what is the general character of the normal or ordinary cases. If the object be to test the existence of some specific faculty of spiritual insight, distinguishable from the ordinary operations of the reason, understanding, or moral consciousness, there may be much to be said for such a course. But when the question is as to the value of religion in life, its advantages are more questionable. Prof. James is quite alive to the defects of these abnormal types of character—the social uselessness and even perniciousness for instance of the more ascetic lives which he records. He fails to consider how far this is due to the very exaggeration or isolation of the qualities or tendencies in question. There is too little attempt to distinguish from an ethical or religious point of view between different kinds and varieties of the religious consciousness, though the feelings of most readers in the perusal of these "human documents" will probably range from the highest admiration and sympathy to a loathing and disgust relieved only by pity. He is right in demurring to the typical "alienist's" attempt to minimise the significance of all such experiences by a free use of such terms as "morbid" or "neurotic"; but we may surely be allowed to protest also against a study of religion in which the sole interest of the inquirer in his subject seems to lie in their abnormal character. To take a concrete case, St. Paul was "caught up into the

seventh heaven" and saw visions. Herein lies apparently for Prof. James the main interest of his "case". He is quite justified in treating St. Paul from this point of view as one of a numerous class of religious enthusiasts, and yet in pleading that that fact does not necessarily prevent our regarding those visions of St. Paul as sources of real "revelation" for the world. But he hardly seems to contemplate the possibility of a point of view from which the highest religious importance and significance of St. Paul may be held to lie, not in the fact that he saw visions, but in the fact that he was so very unlike the majority of persons who at various periods of the world's history have seen visions. Those visions, however we explain them, were no doubt, at that time and place, a condition of St. Paul's exceptional religious influence, and yet St. Paul the thinker, the spiritualiser of Jewish Theology and the rationaliser of Jewish Ethics, may be much more important than St. Paul the ecstatic visionary. Without denying the religious value of the vision which formed the turning-point in St. Paul's life, the most remarkable thing about St. Paul was not so much that he spake with tongues more than his converts, but that (unlike them) he attributed comparatively little importance to them in comparison with the higher and more rational gift of "prophecy". Prof. James's preoccupation with the marvellous and the abnormal almost inevitably conducts him to, if indeed it is not inspired by, a determination to find the essence of religion in feeling and emotion, and to belittle its rational or intellectual side.

But it is with Prof. James's metaphysical or philosophical conclusions that we are chiefly concerned here. He puts to himself the following questions:—

"First, is there, under all the discrepancies of the creeds, a common nucleus to which they bear their testimony unanimously?

"And, second, ought we to consider the testimony true?"

"I will take up the first question first, and answer it in the affirmative. The warring gods and formulas of the various religions do indeed cancel each other, but there is a certain uniform deliverance in which religions all appear to meet. It of two parts:—

"1. An uneasiness; and

"2. Its solution.

"1. The uneasiness, reduced to its simplest terms, is a sense that there is *something wrong about us* as we naturally stand.

"2. The solution is a sense that *we are saved from the wrongness* by making proper connexion with the higher powers."

"The individual, so far as he suffers from his wrongness and criticises it, is to that extent consciously beyond it, and in at least possible touch with something higher, if anything higher exist. Along with the wrong part there is thus a better point of view, even though it may be but a most helpless germ. With which part he should identify his real being is by no means obvious at this stage;

but when stage 2 (the stage of solution or salvation) arrives, the man identifies his real being with the germinal higher part of himself ; and does so in the following way. He becomes conscious that this higher part is conterminous and continuous with a MORE of the same quality, which is operative in the universe outside of him, and which he can keep in working touch with, and in a fashion get on board of and save himself when all his lower being has gone to pieces in the wreck " (pp. 567-568).

I am quite willing to accept the positive side of Prof. James's contention—that these abnormal experiences do carry with them some probable evidence in favour of the reality of a spiritual world beyond the experiences themselves—in other words they do supply some evidence, to put the matter in a more definite and theological way than Prof. James himself would do, in favour of the existence of a God who is a moral being and of a future for the individual soul continuous with its present life, though I find it difficult to estimate the exact degree of weight which ought to be given to such experiences when taken in isolation from other arguments the validity of which would probably not be admitted by Prof. James. But Prof. James is not content with claiming consideration for the line of thought with which his book is occupied. He is prepared apparently to base religion entirely upon the evidence afforded by these abnormal experiences to the few who have gone through them. The rest of us must apparently depend entirely upon the external testimony of those who have experienced such things. Of all other arguments or metaphysical considerations Prof. James speaks with jaunty and light-hearted contempt. And no wonder: for his own metaphysical position, it would seem, is practically Hume's. It is clear that it would be useless for a reviewer who believes that Sensationalism was refuted once for all by Plato in the *Theatetus* to enter into closer argument with a writer holding such a position—especially as neither old arguments nor new ones are adduced in support of his conclusion. Prof. James appears to rely exclusively upon that old topic of the Philistines, the disagreements of the Philosophers. "I need not discredit Philosophy by laborious criticism of its arguments. It will suffice if I show that as a matter of history it fails to prove its pretension to be 'objectively' convincing. In fact, philosophy does not so fail. It does not banish differences; it founds schools and sects just as feeling does (p. 436)." But do not Science and Politics found schools and sects, and is Prof. James prepared to hand over Science and Politics to the undisputed sway of subjective caprice or emotion, because there is not as yet a complete consensus as to the truth of Weismannism or the advantages of Democracy? There is one faith which all sects in Philosophy at all events have in common, except the sect to which Prof. James belongs, and that is faith in the validity of Reason, in the existence of truth and the duty of pursuing it. There is a faith which all religions as well as all philosophies have in common and that

is the faith if a thing is really true, it must be true for you as well as for me. And that is just the truth which Prof. James categorically denies. I am not of course questioning the value or the partial and relative truth of many conflicting creeds, but they have their value just on one condition—that those who profess them really do believe them to be objectively true. They need not of course believe that they are infallible. We make mistakes in arithmetic, but we believe that *if* my answer to a problem in arithmetic be true, yours which differs from it cannot be true also. "To believe" means to think that a thing is objectively true. This is just the faith which Prof. James does his best to dethrone by inviting every one to believe just what caprice dictates. "The gods we stand by are the gods we need and can use, the gods whose demands on us are reinforcements of our demands on ourselves and on one another" (p. 331). All the Philosophies or Religions which believe in objective truth, no matter what their disagreements in other matters, have more in common with each other than they have with Prof. James's revived Pyrrhonism. Prof. James's position can only be described as a deliberate abandonment of the search for truth and a handing over of Religion and Morality (and why not Science?) to the sway of wilful caprice. To me at least to believe that my Religion or Philosophy was only true for me would be exactly the same thing as not believing it at all. Of course Prof. James is not consistent—no sceptic ever is. "In our Father's house are many mansions, and each of us must discover for himself the kind of religion and the amount of saintship which best comports with what he believes to be his powers and feels to be his truest mission and vocation" (p. 377). Beautifully put, but then this implies that there is an objective canon which makes one mission and vocation "truer" than another; it may be different in detail but the ideal by which its value is measured must be one and the same. I gladly recognise that my creed and the discrepant creed of my neighbour may both of them really be but approximations to or partial aspects of *the* truth, but to believe that both may be *equally* true is equivalent to not believing either to be true at all.

Prof. James's book is eminently one which "gives to think". As such it has a high value, intellectual and practical, and particular suggestions and ideas of it—for instance, its emphasis on the importance of the "subconscious self," to whose working the author attributes many of the religious phenomena which he studies—may contribute to the building up of a sober and rational philosophy of religion in the future. The candour and breezy optimism of his tone are attractive and stimulating. But to those who do not agree with it, its philosophy will seem (as a whole) flimsy and superficial. To such minds Prof. James's profound disbelief in Reason will suggest something more than a doubt whether in its real tendency the book is as edifying and religious as it evidently is in the intention of its author.

Prof. James insists much upon the fact that for the fortunate

few who have undergone these immediate religious experiences they carry their own authority with them, and that therefore all inquiries into their objective validity are useless. That may be the case so long as reflective thought is excluded. But how often does it not happen that to those who have had, or thought they had, this immediate religious insight subsequent intellectual emancipation has brought doubt and disquietude? The very point that they doubt is whether their own emotions, intuitions, even visions were anything but the outcome of subjective wishes or a disordered brain. The world cannot be sharply divided, as Prof. James's wants to divide it, into those who possess immediate and self-sufficing insight and those who have had no religious experience at all. There are thousands who will not and cannot trust whatever faculty of moral or spiritual insight they possess unless they are presented with a creed which satisfies their Reason. To be told to believe whatever they wish to believe only plunges them into a deeper scepticism. Such minds can only find the satisfaction that they require in a very different philosophy from that which underlies Prof. James's book.

H. RASHDALL.

Studies in the Cartesian Philosophy. By NORMAN SMITH, M.A., Lecturer at Queen Margaret College, and Assistant to the Professor of Logic in the University of Glasgow. London: Macmillan & Co., Limited. New York: The Macmillan Company, 1902. Pp. 276. Price 5s. net.

THIS book should prove a real boon to the advanced philosophical student. Mr. Smith has most ably and effectively singled out the guiding ideas and assumptions of Descartes' metaphysics, and from their picturesque genesis in Augustine's writings—the philosopher and the saint are not confused by Mr. Smith—has traced their development through Spinoza, Leibniz, Locke and Hume to the *Critique of Pure Reason*. It is the story of the Cartesian assumptions sketched with singular freshness and respect for facts in a clean, terse style, the one very pardonable defect of which is perhaps an over-readiness to sacrifice lucidity of exposition to thoroughness of treatment. The reader's indulgence towards footnotes is somewhat overtaxed (many of them might with advantage have been promoted to the text), but, as though to offset the element of distraction thereby introduced there is a short but exceedingly serviceable index.

The opening chapter deals with 'the Problem of Descartes,' the dualism between Self and Nature, which was involved in the general thought of Descartes' day and was the product partly of the individualistic tendencies of Christian Philosophy and partly of the then awakening conception of a despiritualised Nature.

This dualism Descartes seems to have accepted as self-evident, and as equally self-evident the theory of representative perception which is logically deducible from it. His assigning the *cogito ergo sum* as the ultimate element in his system would therefore be due to his overlooking the two more fundamental presuppositions on account of their self-evidence. Our author indeed insists that if we are to avoid an utter misrepresentation of the facts we must note that, so far as the internal dialectic of Descartes' thought is concerned the dualistic theory is the most fundamental basis of the Cartesian system, the theory of representative perception being a mere deduction from it, and the *cogito ergo sum*, a mere logical deduction from the theory of representative perception.

Though much stress is laid on the logical order here indicated, the evidence adduced in its support is not convincing (*cf.* p. 116 and note, and p. 249 and note). Moreover the analogy of Augustine's internal dialectic (*cf.* p. 6) distinctly points another way. Readers of *Scottish Philosophy* are further aware that it is at least as easy to deduce the theory of representative perception from the *cogito* as it is to deduce the *cogito* from the theory of representative perception.

The treatment of Descartes' Method in chapter ii. is excellent. It is shown that Descartes' insistence on Method is due to the fact that, as he interprets it, it expresses the innermost essence of mind and so that the problem of method is identical with the problem as to the nature and limits of knowledge. Descartes' Method is the intuitive-deductive method of mathematics. Intuition, which is 'not a fitting together of premisses but a dialectic,' 'a growing capacity of the mind for truth,' is the source of all our knowledge. Deduction is 'simply the process by which intuition extends itself so as to take in the complex, that at first appears to lie outside its sphere'. It is knowledge in the making. The limits of knowledge lie on the one side in the simple natures from which Intuition starts, on the other in the "possible fruitfulness" of these and in their "adequacy to the comprehension of the real".

In the criterion of truth which Descartes utilises in the employment of his Method we have the first clear evidence of that *rationalism* which is one of the characteristic features of Cartesianism. Misled by the scholastic doctrine of essence, he interpreted his criterion as meaning not only "that all that in thought is clearly and distinctly conceived to be necessarily connected must be likewise inseparable in existence," but that "in the case of ideas between which the mind can perceive no connexion, the existences corresponding to them must also be unconnected".

Now as the simple natures with which Descartes starts are one and all abstract general conceptions we are led by this criterion to see the mirror of real existence in the rational, ordered concatenation of general conceptions. Nature reveals herself adequately and transparently in the rational framework of mechanical science.

This rationalism, then, which, by its elimination of the accidental as unreal, becomes also a conceptual atomism, involves by its elimination of contingency from reality a view of nature so abstract that no room is left for change and the operation of physical causes, so that causation is necessarily identified with explanation. Our author proceeds to show that whether we insist on the abstract conceptualism of Descartes' scheme or on its atomism we are either way inevitably led to a thorough-going Occasionalism. One of the most instructive features in these studies is the way in which our author shows how the imperfections of Descartes' rationalism, not only in his own writings but in that of his followers, are shown up at every turn by the logical necessity of resorting to an illogical *deus ex machinâ*, the occasionalistic solution being "the attempt to introduce in an external form that necessary relation to the infinite which ought to have been kept in view from the start". To construct a philosophy on an abstract basis, whether on rationalistic or empiricist lines, is simply to court the necessity of occasionalistic theory. Thus Dr. Ward's criticism of Spencer's philosophy in his Gifford Lectures amounts to a censure of Spencer's Occasionalism. We infer, indeed, from our author's treatment that the only way of avoiding Occasionalism in the development of a philosophical theory is to start, without making any assumptions, from an analysis of actual experience. This is the final conclusion of the book as reached in the chapter dealing with the transition to Kant, and, in its general form, seems to be one of those truths which philosophers might well be induced to accept as a common basis for further discussion; the conflict might then be suitably concentrated on the meaning to be attached to experience.

Occasionalism means further the introduction of an unauthorised Spiritualism into philosophical doctrine and into the Cartesian doctrine in particular. 'Spirit,' we read, 'is in the system of Leibniz, as in that of Descartes, the *deus ex machinâ* that solves all the irresolvable difficulties caused by a rationalism that is based on the scholastic doctrine of essence. Hence we are not surprised to find further on that "with Hume's destruction of the occult self, the occasionalist system of Descartes collapses like a house of cards".'

The fortunes of the doctrine of representative perception through all the line of thinkers between Descartes and Kant are fully discussed by our author. Indeed the greater portion of the volume is devoted to following up the history of Descartes' three fundamental tenets, his theory of representative perception, his rationalism and his spiritualism, to their final collapse under Hume and Kant. In Spinoza it is Descartes' rationalism which is the main undermining influence, compelling Spinoza to identify causation with explanation, to evolve an empty pantheism—the counterpart of the Cartesian atomism—and so to negative a strong tendency of his to view reality concretely, a tendency not sufficiently recognised by Spinoza's critics. In Leibniz, Descartes' rationalism, through the doctrine of essences on which it is based, affords the mainstay

of his monadism. The influence of Descartes' rationalism over Locke is especially felt in the Fourth Book of the Essay. "For Locke, as for Descartes, mathematical reasoning, falsely interpreted, remains the ideal of knowledge. Empirical knowledge when compared with this ideal is condemned in every respect." Our author, indeed, gives excellent grounds for justifying one in regarding Locke as essentially a rationalist, his sensationalism being "but externally tagged on to his rationalism". This is good criticism, but it seems a remarkable oversight that in this connexion Bacon's influence over Locke should not have been taken into account. Bacon's own empiricism is weighted with a theory of forms which, like Descartes' theory of abstract conceptions, is rooted in the scholastic theory of essence, itself a product of Greek thought, and it would be more just to attribute to this hoary prejudice, which is *par excellence* the butt of modern Idealism, the responsibility for atomic rationalism wherever it appears as a philosophy, whether in Bacon or Descartes, Leibniz or Locke, than to press the central responsibility back upon Descartes.

The excising of the spiritualism and rationalism from the Cartesian system, together with the Occasionalism they involved,—an Occasionalism which reached its climax in Berkeley's spiritualistic system, is shown to be due to Hume. Hume is, however, only a half-emancipated Cartesian, though he is working towards Kant's position. He is still under the spell of the doctrine of representative perception, holding the Cartesian view 'that the function of knowledge is to reduplicate an independent reality'. At the same time his logical position, like that of Kant, is rather phenomenalism than subjective idealism. He is logically committed, not to the contention 'that we know nothing but purely subjective states,' but rather to the view 'that nothing subjective as distinguished from objective is conceivable by us'.

The transition to Kant by which the Cartesian assumptions are transcended is peculiarly well treated. The theory of representative perception falls before the Copernican idea that as cognition cannot be made to conform to objects, it may well be that objects conform to our ways of knowing; and in the Objective Deduction of the Categories this revolutionary thought is tempered by what amounts to the admission that it is as true to assert that nature makes the Self possible as that the understanding creates Nature.

As regards Kant's method the refreshing confession is made that "the outlandish title of 'transcendental' need not conceal from us that it is simply the hypothetical method of physical science applied in the explanation of knowledge," and the conclusion is drawn that, starting as Kant does with experience (and indeed not with experience as a whole, but with the simplest act of knowledge, *viz.*, Consciousness of Time), Kant is alone the truly empirical philosopher, Hume's method being by contrast *a priori* and dogmatic. We are thus introduced by Kant to the true concrete, experimental point of view whence 'Modern Philosophy makes a fresh start'.

Such is the gist of these Studies in the Cartesian Philosophy. Though essentially a student's book, closely reasoned and in fresh contact with the original sources, it is full of suggestion even to the mere reader. Mr. Norman Smith has the insight and expressive force of an original thinker and to the many who love to see old problems freshly handled the book cannot be too cordially recommended. They will find these studies striking to the point of vividness and eminently suggestive.

W. R. BOYCE GIBSON.

VI.—NEW BOOKS.

Modern Spiritualism: A History and a Criticism. By FRANK PODMORE. London: Methuen & Co., 1902. 2 vols. Vol. i., pp. xviii., 307; vol. ii., pp. xii., 374.

MR. PODMORE'S book has, on the whole, met with so favourable a reception in the daily and weekly press that it would be superfluous now to insist upon its very real merits. His style is easy, flowing, agreeable to a fault. His competence is undoubted. Few sources of information can have escaped his diligent search. He has brought together a mass of material which will be indispensable to all future students of the subject; and if we are led to complain of what he has left undone, it is assuredly not from any want of gratefulness for what he has given us.

The author's object is explained by his title. On the one hand he has to narrate the growth of Spiritualism as a religious system, to trace its descent from pre-existent beliefs, to explain the conditions which favoured its success. On the other hand, he seeks to determine how far the belief was justified. This he does, now by criticising accounts of the alleged phenomena upon which the belief was based, and setting forth their evidential shortcomings, now by pointing out the analogies between some of the phenomena of the mediumistic trance and such well-known features of hypnosis as automatisms, hyperæsthesia, impersonation—or more debatable phenomena such as teleæsthesia and telepathy. In the earlier part of the book criticism goes hand in hand with narrative; but the latter part is exclusively devoted to criticism. Hence a certain lack of continuity in the exposition, a want of symmetry in the plan. Book iv., on the Problems of Mediumship, is not so much a sequel to the previous books as a separate work, written from a different point of view. Certain typical mediums are chosen—Eusapia Palladino, D. D. Home, Stainton Moses, Mrs. Piper—the evidence as to whose phenomena is specially copious, detailed, or precise, and a critical attempt is made to appraise the value of the evidence. Book iv. is really a treatise on psychical research, and he fails to make clear the relation between a scientific investigation into the alleged facts and the system of belief connected with them. This treatment is a natural result of what is in our view the chief defect of Mr. Podmore's book. He has nowhere troubled to define the psychological nature of the spiritualistic faith. To explain adequately the rise and growth of a religious belief it is of course needful to analyse the nature, first of belief in general, then of religious belief, and of the special religious belief in question. Two problems are to be distinguished: one of general, the other of social psychology; and the former is anterior to the latter. Mr. Podmore does indeed undertake to explain how Spiritualism spread and prospered. But just because he does not tackle the anterior problem, he

must fail to solve the other with any completeness. Nor is the cause of his failure far to seek. His attitude is too little that of the psychologist, less interested in outward fact than in mental process; too much that of the ordinary man, concerned rather to explain away than really to explain. For him a delusion is a delusion, and it is nothing more. He sees it from the outside only. It is an inevitable consequence of this attitude that for him the history of Spiritualism practically resolves itself into the history of the phenomena alleged to have occurred in the presence of spiritualist mediums. But this is surely an erroneous view. Mr. Podmore himself is never tired of pointing out how the Spiritualist's faith has survived the exposure of countless fraudulent mediums, how it has remained unshaken even while its flimsy edifice of accumulated marvels was crumbling to the ground. The faith may or may not have been really occasioned by the alleged phenomena. At least it is something very different from a rational theory about them. It is a form of Supernaturalism, and it is to be regretted that Mr. Podmore has missed a splendid opportunity of making a solid contribution to the psychology of religion by analysing this belief.

Book i. is called the Pedigree of Spiritualism. But that is a misnomer. It is really a pedigree of the spiritualistic phenomena. There is no continuity between the supernaturalist belief in witchcraft, and modern spiritualism; as Mr. Podmore points out the Sympathetic System and the doctrines of Paracelsus and his followers were essentially scientific, and supernaturalist only by way of exception, as in the case of Valentine Greatrakes. So too the explanations given by the French mesmerists from Mesmer himself down to Pététin and Deleuze, of their patients' convulsions, trances and automatisms round the *baquet*, were one and all naturalistic in type. The continuity is between the phenomena which gave rise to these different beliefs and theories. In France, Alphonse Cahagnet (1848) seems to have been the first spiritualist of any note. But whether he approached the problem of mediumship as the result of earlier experiences with mesmerism, and what was the connexion between the ordinary magnetic somnambule and Adèle Maginot, we are not told. Indeed Mr. Podmore makes it probable that Cahagnet was not unacquainted with the writings of Swedenborg; and in the sequel he shows how great was Swedenborg's influence upon the development of spiritualism in the United States. It is therefore at least strange that in this 'pedigree of Spiritualism' there should be such scant mention of the Swedish seer's visions. Mr. Podmore must remedy this serious defect in a second edition. In Germany, thanks to the prevalent idealistic interpretation of the laws of nature, mesmerism took quite early a spiritualistic turn. In England, mesmerism, as it was introduced from France, so it followed the French example. The phenomena were explained on the analogy of magnetism and electricity, with an occasional appeal to Reichenbach's odyllic force. It is in America that the evolution of the magnetic somnambule into the inspirational medium was consummated, thanks to the trance-utterances of the Poughkeepsie seer, Andrew Jackson Davis. Mr. Podmore shows the connexion between the new forms of religion started by Davis, "Principles of Nature," fostered by the 'Universealium,' and all manner of novel ideas—social, moral, political—then fermenting in the raw brain of the United States; and he makes good use of this connexion when he essays to account for the "facile acceptance and ready spread of the new marvels" of Spiritualism. He finds the essential conditions in the general character of the *milieu* "in the general diffusion of education combined with an absence of authoritative standards of thought and the want of critical training; in the democratic genius of the American people; in their

liability to be carried away by various humanitarian enthusiasms; in the geographical conditions incident to a rapidly expanding population".

Modern Spiritualism proper began in Arcadia with the mysterious rappings of the Fox girls in December, 1847. Within three years there were few towns of any importance without their rapping mediums. Within seven years the movement had acquired that complex character which it preserved throughout its later development. Spirit-rapping, slate-writing, *apports* of objects, levitation of the human body, materialisations, all these were familiar to the earliest spiritualists, and all these were new. Not so the mediumistic trance, nor the numerous cases of apparent thought-transference or clairvoyance. These had been mesmeric commonplaces for half a century on both continents. But the trance-utterances of A. J. Davis and T. L. Harris excel anything of the kind that had been known before. The illiterate Davis filling "800 closely printed pages" with a whole system of the Philosophy of Nature (his trance-lectures were spread over a period of fifteen months. He was twenty-one when the book was published, and protested that till then he had never read but one book and that an historical romance); the Rev. T. L. Harris dictating in the trance the 3,000 or 4,000 lines of his *Epic of the Starry Heavens* (fourteen consecutive days sufficed for the task)—these are the classic instances of '*automatisme psychologique*' in literature, beside which all the glossolalia of all the religious revivals fades into insignificance. Table-turning invaded England in 1853, but the 'classic period of English Spiritualism' began with the invasion of mediums from America in 1860. In the following decade professional and private mediums (the ineffable Mrs. Guppy chief among the latter) were alternately deceiving the public and exposing one another. At one time or another, the Davenport, the Foxes, Slade, Eglinton, and a crowd of minor impostors, were all convicted of fraud. In many cases, professional conjurers have improved upon the performances of mediums who seem to have been little better than bungling amateurs. The average Spiritualist looked for a sign, and was only too glad of a counterfeit. It mattered nothing to him that the marvel was spurious. It was token for the gold of whose real existence he felt convinced. Nor is the Spiritualist's attitude a new or strange one in the history of religious conviction. Let any one reflect upon the orthodox Christian's view of miracles. Once the spiritualistic belief started somehow, it is easy to understand how it could feed on such poor stuff as fraudulent charlatans had to offer. Given a blind faith, *plus* a very dark room, and expectant attention may well lead a man to recognise the seraphic features of his beloved in an animated broomstick capped with a bit of muslin rag. Illusions, hallucinations, visions of a mind fevered with a rapt expectancy—we can readily admit that the convinced spiritualist will fall an easy prey to them. But are they the sole causes of the belief in the occurrence of the phenomena associated with spiritualist mediums? Mr. Podmore's answer is in the affirmative so far as the so-called physical phenomena are concerned. We agree perfectly with him when he separates these sharply from the so-called 'psychological phenomena' and when he finds himself unable to admit that Mrs. Piper's trance-utterances can be adequately explained on the hypothesis of fraud, or of the normal acquirement of information. But we feel bound to examine critically his attempted explanation of the physical phenomena observed in the presence of D. D. Home. As is well known, the evidence for them (levitation, elongation, materialisation, moving of objects without contact, handling of red-hot coals, etc.), is exceptionally strong. We have no space for anything like an adequate discussion. That would involve a review, not of shreds of

evidence, after the fashion of Mr. Podmore, but of the mass of testimony considered as a whole.

Our author's theory is, in brief, that Home was an accomplished conjurer, and that part of his equipment, and perhaps of every medium's equipment, was the power to cause other people to experience definite hallucinations. Sir Wm. Crookes' theory, based on the results of experiment, was, and is still, that Home's phenomena were not clever pieces of conjuring, but were due to the operation of a peculiar physical force. Mr. Podmore's strictures are of two kinds. On the one hand, some of the effects observed in Home's presence are such as might have been produced by an expert conjurer, and unless we can be certain that all his actions were subjected to continuous observation, the presumption of sleight-of-hand is too strong to be resisted. But it is well known that continuous observation is impossible; and no phenomenon can be above suspicion the testimony for which rests upon the need of continuous observation. With this view we are in emphatic agreement. Sir Wm. Crookes' experiments on Home's alteration of the weight of material objects cannot be held strictly to prove his own conclusion on account of a defect which is at least formal, *i.e.*, the need and the impossibility in these experiments of continuous observation. But to recognise this is not to consider Mr. Podmore's own solution as proved. It is one thing to admit the abstract possibility of fraud; it is another to fly to the conclusion that under the circumstances fraud could be, or was, actually practised. Now Mr. Podmore believes that this was the case. He tries to show how in particular instances the trick might have been, and probably was, done. We venture to say that no serious student of the whole evidence will think his explanations plausible, for the simple reason that whilst they may be acknowledged to fit the special instance chosen, they can not, without doing great violence to the recorded evidence, fit a number of other instances which our author does not quote. Thus when he postulates an invisible thread attached at one end to the hook of the spring-balance, and at the other to Home's feet or knees, he forgets in the first place that the force required to depress the marker through a given number of degrees varies according to the angle at which it is applied. He forgets, again, that the balance was apparently affected, not only when Home was sitting near it with his hands on one end of the board, but when he was sitting at some distance from it, with his hands on the dining-room table, and his feet turned away from the balance, etc. . . . When, again, Mr. Podmore explains how the lath was made to move, by means of an invisible thread passed over the gaselier, it may be conceded that such an arrangement could account for movement in one plane. But he forgets the other instances in which the movement was more complex. The gaselier may have been as handy as he imagines, and the threads may have been as invisible as he would have us believe, but how complicated an arrangement of them would be needed to make the lath float round the table, with upward and downward jerks, until one end settled on Sir Wm. Crookes' hand, answered his questions by means of the usual taps, and even spelled out a long message in the Morse code! Nor can we profess to be convinced by Mr. Podmore's hypothesis of hallucination. Sir Wm. Crookes was not a spiritualist. At or about the date of his séances with Home, he was at work on Thallium and its atomic weight, on Repulsion resulting from Radiation, on the Radiometer, and Radiant matters. Surely it is difficult to conceive his critical genius disarmed and lulled to a credulous slumber by the mere presence of a medium, however charming in manner, and affable in speech. For candour must compel Mr. Podmore to recognise that, so far as the evidence goes, there was little or nothing

of the hypnotist's *mise en scène* in most of Home's performances! What, then, is Mr. Podmore's explanation of the power he finds in Home to impose on other persons hallucinatory experiences? Suggestion—hypnotic and waking—we know, and every one is ready nowadays to see in it a *vera causa*. Thought-transference Mr. Podmore believes in just as firmly. It is admitted that we are ignorant even of the conditions, much more of the limits of operation of either. Mr. Podmore straightway assumes that they have no limits and that they will explain everything. It may be even as he believes. His conviction at least is not that of scientific knowledge. Surely it were better to confess the very real ignorance which he shares with a number of other fairly competent and critical minds.

F. N. HALES.

Philosophy of Conduct. A Treatise of the Facts, Principles and Ideals of Ethics. By GEORGE TRUMBULL LADD, Professor of Philosophy in Yale University. London: Longmans, Green & Co., 1902. Pp. xxii., 663.

The scope and aim of this voluminous treatise are stated by the author as follows: "To raise, even if it cannot completely answer, the more ultimate problems of conduct as our experience forces them upon the reflective thinking of mankind"; or, stated more fully, "to investigate the nature of man as moral (capable of conduct), to classify and discuss the different forms of his conduct as coming under moral law and constituting the so-called 'duties' and 'virtues,' and to treat speculatively the ultimate ethical conceptions regarded as having their ground in the existing system of the Universe. Such a treatment naturally results in the three following divisions of the one treatise of the Philosophy of Conduct: (1) The Moral Self; (2) The Virtuous Life; (3) The Nature of the Right."

On the other hand, although the treatise is a 'Philosophy,' and Ethics 'one of the Sciences of man,' we must ever remember that "Aristotle's caution applies. It is not fitting, in accordance with the very nature of the subject to expect, or even to seek for, that more perfect accuracy which is demanded of the physical and natural Sciences. Neither in respect of minuteness of detail, nor of mathematical exactness, nor of definiteness, nor of finish, nor of justifiable subtlety of argument shall we expect, or strive, to rival the work of the physicist, the chemist, or even the physiologist or biologist."

This portion of the spirit of Aristotle (to whom reference is made in every chapter) pervades the whole work. Moderation in all things, even in cogency of reasoning, is, throughout, the characteristic note. Hence the critical estimate of the value of this treatise will vary with the temperament of the reader. The 'practical' mind will award it unqualified praise; the scientific temper will incline to rate it much below its true merit. For, indeed, the greater portion is of the nature of a sermon rather than of a science. It is dedicated to "a good man"; its keynote is the "Might of Goodness"; such sciences as psychology, epistemology, and metaphysics are of value only in so far as they are "directed to the rational and practical betterment of the life of conduct"; this betterment is the "end in view" which, in all his investigations, the writer has had; he expects "indifference, if not secret or more open antagonism," to his "efforts to elevate the tone of the prevalent consciousness," from the "relatively low and nerveless ethical condition of the current Christianity"; but in full confidence that moral principles and ideals will

"remain substantially inviolable" he "puts forth this essay in times which" he "is compelled to regard as by no means favourable to its most unprejudiced and practically effective reception".

So long as we are dealing with "The Virtuous Life" this moral earnestness and the religious convictions to which it is due add to, rather than detract from, the value of the teaching. The author's account, historical and descriptive, of the particular virtues, under the convenient old-fashioned division into Virtues of the Will, of the Judgment, of Feeling, is excellent. The analysis is clear, sensible, straightforward; the protest against undue straining of words in the interests of some narrow psychology conveys a useful warning; the occasional epigrams are distinctly to the point, and the author's meaning is brought out by illustrations which show width of reading and shrewdness of observation. But, from a treatise which claims to be a "fundamental discussion of ultimate problems," we have a right to expect more than thoughtful suggestions for the general reader. Clearness of definition of the more important terms, cogency of reasoning from premisses to conclusion, some justification of premisses assumed, are essential to a scientific or philosophic treatment of any subject, and they are all absent from Prof. Ladd's treatise. Rejecting all *a priori* methods the author prefers to "follow the lowlier and more humble but much surer and safer path of psychological and historical inquiry". "This empirical path" (he truthfully adds) "conducts us irresistibly to the presence of the ultimate metaphysical problems." When, however, we examine the inductive process so sketched we find that the problems are already solved to begin with, and the facts which should form our starting-point are looked at through the coloured medium of this solution. These empirical facts are two: "Man is, as a matter of fact, a moral being. Man is also, as an equally sure matter of fact, a religious being." Further examination shows "the practical insufficiency of morality to sustain and elevate its own principles without support and help from religion". "Religion imparts warmth and vitality to morality;" so much so that, "if the postulates of religion which the constitution and history of man seem to warrant him in accepting be made the faith of the Soul and the guide of the practical life, many of the practical antinomies of Ethics are either completely solved, or much relieved". From this it follows that morality must be based upon Religion by identifying the Ground of Morality with the World Ground, and "conceiving of this World Ground as the ideally righteous and holy personal God". This God is the Creator and Sustainer of Reality. Man is His child and knows this Reality, for it is not true that knowledge is of phenomena or that human mental functionings are open to scepticism. "On the contrary, reality is implicate in all knowledge; and in every exercise of the knowing faculty the testimony plainly is—I, the actual, am not afar off, but nigh thee, even within, an integral part of thy Self, the knower. The doubt of this truth—the truth of all truths—is so irrational, so absurd, that it does not even admit of a consistent and intelligible statement by one mind to another, or by any one to one's own conscious mind."

It is impossible to reason with, very difficult even to criticise, a writer whose conception of a fundamental discussion of ultimate problems differs so much from that of ordinary people. But for the reader who can conscientiously adopt Prof. Ladd's *Weltanschauung* the book is of considerable value. A fair summary of its contents would run somewhat as follows: Ye are Christians, walk worthily of your Vocation—your Vocation is to realise the Moral Life—the Moral Life is not a theoretical abstraction but a concrete Personal Ideal functioning in certain definite

ways called Virtues—these Virtues are many in number, but are all related as functions of the one Self—hear them, in detail, what they are and how to realise them—remembering always that they must be realised in the World and that *the World is God's world*. [The italics are Prof. Ladd's.] Such a reader will find himself strengthened by much thoughtful analysis; he will be practically helped by many sound maxims, and will (doubtless) be sympathetically stimulated by the concluding exhortation (p. 653): "Hold to the Ideal and ever lift it up; be sensible and wise in practical affairs, patient with yourself, and with all men, and with God—also, courageous, and full of faith and hope".

W. H. FAIRBROTHER.

The Strength of the People. By Mrs. B. BOSANQUET. Macmillan & Co., 1902. Pp. vii., 345.

Mrs. Bosanquet speaks, towards the close of this book, of the importance of expert opinion in social questions; and there are few better qualified, by their combination of historical and speculative knowledge with practical experience and sympathetic effort, to take rank as experts in the subject. Yet we think the book likely to illustrate how limited is the authority which in such a field expert opinion can hope to command; some will welcome it enthusiastically as a statement at once scientific and sympathetic of the true principles on which social work should be undertaken; while to others we can imagine it seeming cold and unprogressive. For the lesson it teaches is that there can be no short and easy road to better things, by legislation imposing new conditions from without; that the secret of improvement lies in influencing character, in supplying people with more and better interests, in convincing them that circumstances are what they make them, and not they the children of circumstance. This is the keynote struck in the Introduction, a good exposition of some very simple psychological truths, far older than those researches of modern psychology into the life of the lower animals, to which Mrs. Bosanquet, on page 6, accords acknowledgment after the fashion of the time. The same principle is reiterated throughout the ensuing chapters, and very forcibly presented in divers ways: by a brief and striking summary of the mischiefs that followed from ignoring it under the old poor law; by an account of Chalmers's success in the Parish of St. John's, Glasgow, as well as in various other passages. Perhaps we should make special mention of the typical history of the good and the bad housewife in chapter iii. It is not unlike Plato's descriptions of typical characters in *Republic*, viii. Like them, it carries conviction; but like them also, it is a 'pure case,' such as but few completely illustrate.

It is probably true, that a man in whom the higher interests are strong enough—interest in his family, in his independence, in the work of club or church or chapel—will find in these a stimulus to work and save, that will bring him well through life, without recourse to charity or the relieving officer. But can you expect so much character in the average man, especially when you consider the conditions under which childhood is passed by many in our cities? Many, who answer no, are prepared therefore to give public assistance, in the form of free dinners, free breakfasts to school children, old age pensions, and such like, or a legal minimum wage. Mrs. Bosanquet's contention is that these palliatives are bound to fail; that any provision which weakens a man's interest in his own independence costs him more than it can bring; economically, because by inducing an expectation of help for which he has not worked, it lowers his output far more than to the extent of the gift; morally, to

an incalculable degree. In particular are measures mischievous which weaken the solidarity of family ties, and the sense in its members that it lies upon them to provide one for another. We love others and care for them, not because of what they bring us, but of what they call forth from us. When the Poor Law undertook those offices which men should themselves render to their parents, the result was that men threatened to turn their parents out of house and home, in order to extort more money from the overseer; and to-day again, in London, they go away, disappearing with no address, and leave parents destitute, in order that the Guardians may be forced to undertake their support. Mrs. Bosanquet acknowledges that this is sometimes done because it is thought the Guardians can do better for them; but the fact remains, that men are improved by what calls forth their energy and interest, rather than by dole or gift.

What then is to be done? Try and make skilled workmen and workwomen out of the unskilled; this will raise the wages of the unskilled as well, by diminishing their numbers. Administer the Poor Law strictly and scientifically: but let there be in every Union an efficient organisation of private charity. Do something after the fashion of Chalmers's 'parochial system,' with individual knowledge of special needs. Get hold of the children, especially when they are leaving school. Encourage 'institutional charity'. But do not attempt to make the State a partner with the individual in bearing his private burdens; "the partnership is too unequal"; he will conceive the State should bear a larger and larger share. The spring of independence will be gone; and what they have not themselves worked for, men will not care for.

Mrs. Bosanquet seems sometimes to overstate her case, as, for example, when she says that "in practice few people can resist the claims of a need which is greater than their own, when brought face to face with it": and in her treatment of the housing problem, in chapter vi., when the difficulties presented by an actually insufficient supply of houseroom are unduly minimised. And those who doubt the possibility of finding sufficient workers who possess the moral force that is to call forth the latent capacities of higher character in those for whose benefit socialistic legislation is mainly intended, will probably still cling to the hope of effecting reform *ab extra*. Yet even they must admit that a great deal which she urges is absolutely true, and very necessary to consider: whether or not the socialism which she dreads would, as she thinks—if the hazardous experiment be ever made—prove incompatible with the true spirit of independence, and the best form of family life.

An Introductory Text-book of Logic. By SYDNEY HERBERT MELLONE.
William Blackwood (Edinburgh and London), 1902. Pp. xiii., 362.

Dr. Mellone has aimed (1) at giving "an accurate exposition of the essentials of the traditional logic," (2) at connecting it "with its Aristotelian fountain head," and (3) at showing "the open door leading from it to the modern philosophic treatment of the subject"; and difficult as it was to attain all these aims adequately in so moderate a compass, he may be congratulated on achieving a very considerable measure of success. He has at least produced a clear, interesting and decidedly useful elementary treatise from his own point of view, *viz.*, that of what may be called the Oxford tradition in logic, as expressed in the works of Messrs. Bradley and Bosanquet. In particular, Dr. Mellone makes out a good case for what seems at first a considerable paradox, *viz.*, that the most modern improvement in logical theory should take the form of a

constant reference to Aristotle. It is strange, however, that he should have in this connexion omitted to explain the meaning of "essence" and to discuss the Aristotelian doctrine on the subject (without which Aristotelian logic is really unintelligible), especially as he himself is constantly speaking of "essential" qualities, etc. As for his relation to modern philosophy Dr. Mellone gives, in the main, a good popular statement of the criticism of empiricist logic initiated by Mr. Bradley, and it is, of course, a considerable service to beginners to have a door opened into a region as arduous as it is fertile. And I find also in Dr. Mellone distinct glimpses of something still more interesting and important. There are symptoms that the results of the psychological study of actual human thinking are at last beginning to percolate into the rigid representations of logical norms, and to act as solvents of many indurated technicalities. So at least I interpret Dr. Mellone's emphasis on the *selectiveness* of observation (p. 264), and the arbitrariness of practical purpose which selects the antecedent which shall be regarded as the "cause" (pp. 256, 259). It is true that he appears to exclude the 'scientific' notion from the scope of his remarks, but it is easy to see that the scientific conceptions of causation are no less relative to the purposes of the various sciences. And if Dr. Mellone will allow himself to think the matter out, he will see that he has inserted between the joints of the traditional logic's harness the thin end of a very long wedge. To recognise the omnipresence of selective attention in our thinking, is to admit its fundamentally purposive character; to admit this, is to admit the conditioning of our thinking by volitional and emotional processes, and therefore, in principle, to banish from logic the cumbrous fictions of "pure thought". Thus "selective attention" means, inevitably, "pragmatism," and pragmatism means a far-reaching transformation and extensive simplification of the traditional formulas. But, perhaps, Dr. Mellone at least suspects a good deal of this, which will be found to be nothing less than the promise (or threat) of a logical reformation.

F. C. S. SCHILLER.

Mutual Aid. By P. KRAPOTKIN. London: William Heinemann, 1902.

Prince Krapotkin's argument may be briefly summarised as follows: Huxley's comparison of the animal world to a gladiatorial show, "where the creatures are fairly well treated and set to fight; whereby the strongest, the swiftest and the cunningest live to fight another day" is not a true representation of the observed facts of animal life: such a struggle, assuming it to exist, would tend to exhaust and weaken a species, and could not alone lead to its progressive improvement: mutual aid is as much a law of animal life as mutual struggle, and as a factor of evolution has probably had a far greater importance, inasmuch as it favours the development of such habits and characters as insure the maintenance and further development of the species, together with the greatest amount of welfare and enjoyment of life for the individual, with the least waste of energy. In support of his first position Prince Krapotkin brings forward a considerable mass of evidence, in the face of which Huxley's famous comparison, already quoted, undoubtedly goes too far. It has always been regarded as too sweeping, by many British naturalists, but the most vigorous opposition to it has come from Russian observers of animal life on the large scale afforded by the steppe lands. In Prince Krapotkin's view far too little importance has been attached to environmental checks on overpopulation. Their action, he thinks, has not merely sufficed to

keep animal numbers below the point at which fierce individual competition would ensue, but has forced most species to adopt, in a greater or less degree, various forms of mutual aid. It is in the economy of effort and energy thus effected, and in the stimulus given by sociability to the growth of intelligence, that Prince Krapotkin sees one, if not the chief, cause of the progressive improvement of species. A great part of the book is taken up with the attempt to show that there is no historical proof that "the Hobbesian war of each against all" was ever the normal state of society. The earliest geological records show man already a gregarious animal. Such forms of mutual aid as the tribe, the village community, the guild, are examined in detail, and the conclusion is suggested that unfettered individualism is, on the whole, a late and abnormal phenomenon. What is undoubtedly proved is that we require much more extensive knowledge, based on unbiassed observation, of animal psychology and animal habit, and that in our present state of ignorance, the application of biological generalisations to sociology is likely to result in error. For this reason it would have been well to confine the present volume to the consideration of mutual aid among animals, with special reference to its bearing on physical and intellectual evolution. The subject requires and deserves the fullest investigation on its own merits.

A History of English Utilitarianism. By E. ALBEE, Instructor in the Sage School of Philosophy, Cornell University. London: Sonnenschein, 1902. Pp. xvi., 427.

Dr. Albee's History is a painstaking and judicious work which will be found useful by all who have to lecture or examine on the subject. For the junior student it is hardly suitable and still less so to the general reader, who will find the minute analysis and criticism of second- and third-rate Hedonists exceedingly wearisome. Its scope and method are quite different from Sir Leslie Stephen's well-known work. Sir Leslie begins with Bentham and takes little notice even of the predecessors to whom Bentham was immediately indebted. Dr. Albee begins with Richard Cumberland and does not reach Bentham till nearly half-way in his book. Sir Leslie devotes himself mainly to the social and political side of English Utilitarianism. Dr. Albee neglects this almost entirely to trace the filiation of abstract theories. His work is a summary of "isms," and never touches on personal character and concrete environment. We are never out of the strictly scientific atmosphere of the lecture-room.

Within the limits he has marked out for himself Dr. Albee's work is well, though not brilliantly, done. The summaries and criticisms are thorough and certainly do not err on the side of brevity, since J. S. Mill, Herbert Spencer and Henry Sidgwick have each three chapters assigned to them. Occasionally we are inclined to think that the wood has got obscured by the trees; and that in the minute discussion of the various and complicated forms of utilitarian theory we somewhat lose sight of the general tendencies and meaning of the whole development of thought. For this reason the latter part of the book is less interesting than the earlier, which explains the connexion of the secular utilitarianism of Bentham and the Mills with the older utilitarianism of theological writers.

H. S.

The Development of Modern Philosophy; with Other Lectures and Essays. By ROBERT ADAMSON, M.A., LL.D., sometime Professor of Logic and Rhetoric in the University of Glasgow. Edited by W. R. Sorley, M.A., LL.D., Professor of Moral Philosophy to the University of Cambridge. Blackwood & Sons, Edinburgh and London, 1903. Vol. i., pp. xlviii., 358; vol. ii., pp. 330.

The rich material contained in these volumes has been mainly collected from lecture notes by students. The first volume consists of a history of the "Development of Modern Philosophy" supplemented by "Suggestions towards a Theory of Knowledge Based on the Kantian". The History has merits which seem to me to belong to no other work of the kind in an equal degree. I need not refer to the accurate and extensive learning which it displays. What gives it its most distinctive value is the systematic unity and continuity of the exposition, which follows persistently the development of certain fundamental questions relating to Theory of Knowledge. The attentive student who follows the guidance of Prof. Adamson cannot fail to realise fully that "History of Philosophy" is Philosophy itself in the making. The treatment of Kant is especially remarkable for the skill shown in disentangling vital and essential points from what is relatively unimportant, and all readers must find Adamson's criticism and critical reconstruction of Kantian doctrine in the highest degree instructive and interesting.

The second volume consists mainly of discussions bearing on the nature of mental development psychologically considered, on Theory of Knowledge, and especially on the relation of Theory of Knowledge to Psychology. Prof. Adamson's original, penetrating and thorough treatment of these topics is extremely stimulating and suggestive. In particular, the connexion of Psychology with Epistemology has never, in my opinion, been handled with so much insight and thoroughness. Fuller notice of this important work will appear in another number of MIND.

EDITOR.

Kant's Prolegomena to any Future Metaphysic, edited by Dr. P. Carus, Chicago: Open Court Publishing Co.; London: Kegan Paul, Trench, Trübner, 1902. Pp. v., 301.

Leibnitz, Discourse on Metaphysics, Correspondence with Arnauld, and Monadology. Translated by Dr. G. R. Montgomery (same publishers). Pp. xxi., 272.

These two additions to the series of philosophical classics issued at low prices by the Open Court Publishing Co. should meet with an extended sale. All who have to teach Kant's Philosophy to ordinary students must have felt the need of a translation of the *Prolegomena* sufficiently cheap to be accessible to the reader with a slender purse. The Leibnitz volume will be exceptionally valuable as containing the first English version of the *Discourse on Metaphysics* and the correspondence with Arnauld, of which the supreme importance for a knowledge of Leibnitz has been so recently shown by Mr. Russell. As the editors decided to annex the *Monadology* to these less-read treatises, it is almost a pity they did not see their way to include the *Principle of Nature and Grace* as well; but it is, perhaps, ungraceful to complain of so useful a book for not being even better than it is. In both cases the work of translation has been efficiently performed. The supplementary matter supplied

to the *Prolegomena* by Dr. Carus is extensive, but perhaps not as judiciously put together as it might have been. Some account of the transpositions detected by recent criticism in the text of the first edition might well have replaced the page given to discussion of the trifling question of Kant's relation to Swedenborg.

A. E. TAYLOR.

Le Fonctionnisme Universel: Essai de Synthèse Philosophique: Monde Sensible. Par HENRY LAGRÉSILLE. Paris: Fischbacher, 1902. Pp. 580.

This work attempts a synthesis of the visible world, considered purely as characterised by intelligible function, from the infinitely small functions of atoms to the supreme function of the "star Solis". The idea of "functionism" is capable of extension from mathematics to morals. As variable numbers are bound in a constant relation, so the acts of real individuals are reciprocally connected in a vital function. Confined by abstraction to the category of extension it is mechanical; but all functions are in origin creations of the free activity of spirit, latent in atoms, explicit in social forms, where being determines itself. All functions are ideas, laws. Under phenomenal activities subsist living ideas, monads exercising persuasive force, *ἐνέργεια ἀκίνητος*, which, as one visible influence opposing another, assumes for us the character of coercive force. A Metaphysic aiming at completeness must go on to develop in idea the psychical and moral aspects of the active development of Being, and this the author intends to do, undertaking, when he finds time, *à trancher par des solutions assez nettes tous les grands problèmes philosophiques*. No lack of confidence, you will observe. The author bases his system on the primary intuition of voluntary activity, revealing, so he claims, the notion of reason, in the three immediate ideas of cause, good, voluntary power of action, united in one concrete relation. He develops it by means of his three supreme and immutable laws: the law of universal reason, the internal law of the act; the law of movement, its external law, and the transcendental law of universal analogy. He considers philosophy as at present cultivated, almost as an effete literary pursuit; but perhaps his knowledge of it might be extended with advantage. He can scarcely hope to return to the doctrine of innate ideas, contenting himself with a bare enumeration of the principles of reason, without offering any deduction of them, or imagine that to define Metaphysics as simply a universal Psychology (p. 41) is satisfactory at this time of day. In fact, as a philosopher he is old-fashioned, holding of Leibniz, and developing a view of the world that had already been sketched by Kant in the *Nova Dilucidatio*, to say nothing of Lotze. Space is the possibility of action among bodies, an immanent divine continuum, penetrating and supporting all beings. When the last form has been suppressed, matter disappears with spatial limit, leaving immaterial substance. Matter consisting in nothing but a constant proportion among the variable actions of immaterial forces. M. Lagrésille is impatient to be done with abstract discussions in order to shed the illumination of mystic insight over the sciences of external nature; or, as it might seem, to take refuge in myth. I have read with curiosity and interest the amazing mixture of science and mysticism which follows his general introduction. Written with great spirit, if, at times, carelessly, *à grands flots d'encre*, this part has a hypothesis to explain everything. Merely to mention the points on which the author has theories would exceed my remaining space; radiant matter, the elements of liquids and solids, gravitation, explained by a law of interception of ether impulsions,

the spots on the sun, and their connexion with the vortices of Descartes, and the formation of planets, may be referred to. Whether it is altogether a work of imagination remains for the scientist to say; at times, as, for example, when dealing with what he terms *Astrobiologie* M. Lagrèsille passes out of the domain of criticism, whether he rises above it by virtue of the access he claims to regions of experience not open to normal humanity, or falls below it by condescending to mere extravagance. I am afraid that neither the philosopher nor the scientist will care much for this book, but the theosophist may find it edifying.

DAVID MORRISON.

L'Évolutionisme en Morale: Étude sur la Philosophie de Herbert Spencer.
By JEAN HALLEUX. Paris: Félix Alcan, 1901. Pp. 228.

This is a critical account of the Evolutionary Philosophy with the *Data of Ethics* for text. Ostensibly divided into two, it falls easily into three distinct sections. The opening section is a fairly accurate *résumé* of the first eight chapters of Mr. Spencer's work. The second section aims at proving that man's evolution from the ape, or even from a type resembling the modern savage, is an open question. In the only part of the work that is strictly ethical the relevant and irrelevant are curiously mingled. Man longs for an ideal, which, the author insists in contrast to Mr. Spencer, must be personal; the altruism of the *Data of Ethics* can have no claim on man as he really is, and still less on man as Mr. Spencer conceives him, for the chain of argument by which that altruism is reached will not stand scrutiny. Further, this ideal is not realisable on earth; Mr. Spencer's philosophy can give no comfort to the "disinherited of this life," nor any sound warrant for deferring the gratification of the moment, pleasure-value being purely subjective. The arguments, however, on which most stress is laid are of a different type, namely, that a belief in the supernatural is universal, that duty has always spelt struggle, and that religion and morality have never yet been divorced in the world's history. The civilising effects, for instance, of the various religions, and especially of Christianity, are dwelt upon at great length. The author, in fact, often fails to trace the real starting-point of Mr. Spencer's arguments, and he never seems quite to realise where it is that he and Mr. Spencer part company. The book, too, as a whole, is excessively wide in scope. Still the criticism is commendably temperate and contains much that is suggestive, in a style that flows, sometimes sparkling, and always clear.

F. G. NUTT.

Die Grundsätze und das Wesen des Unendlichen in der Mathematik und Philosophie. Von Dr. KURT GEISSLER. Leipzig: Teubner, 1902.
Pp. viii., 417.

The present work is not destitute of ability, but unfortunately the author has failed to grasp the importance for his subject of Cantor's work on the infinite, and of the modern elimination of the infinitesimal by the method of limits. Consequently it may be doubted whether his book does more to advance the subject than would be done for Astronomy by a book based upon the Ptolemaic theory.

The first 297 pages deal with various special mathematical problems, taken almost wholly from Geometry and Dynamics, not, as might be wished, from Arithmetic. These problems are designed to illustrate the

necessity of the infinite and the infinitesimal in explaining curves, tangents, irrationals, continuity, velocity, acceleration, the infinitesimal calculus, etc. Various contradictions liable to arise in treating these subjects are discussed, and are solved by the old doctrine of orders of the infinite and the infinitesimal, together with a logico-metaphysical theory which the author calls that of *Behaftungen*. It is unfortunate for his views that the infinitesimal is now known not to occur in any of the problems which he discusses, being replaced everywhere by the doctrine of limits; it is still more unfortunate that the idea of orders in the infinite and the infinitesimal has been shown to be quite inexact and vague. When two infinite series of finite numbers, whose n^{th} terms are x_n and y_n respectively, are such that, given any finite number N , there exists a finite integer n such that x_n , y_n , and x_n/y_n are all greater than N , we say that the limits of the two series are infinite, and that the series of x 's becomes infinite of a higher order than the series of y 's. But as a matter of fact both series have as their limit the same number, namely, the number of finite numbers. Similarly where infinitesimals appear we have really nothing but series of finite numbers whose limit is zero. That infinite divisibility involves infinitesimals is assumed by Dr. Geissler as self-evident, although, in the case of the rational or the real numbers, the opposite is capable of formal proof. In Euclidean space, as treated by analytical geometry, although space is infinite and infinitely divisible, yet every distance is finite, *i.e.*, has a finite ratio to every other distance; and the apparent impossibility of such a state of things is a mere illusion dispelled by exact reasoning.

Pages 297-335 are occupied in a historical review of opinions as to infinity. Only seven pages in the whole book (pp. 325-332) are devoted to Cantor, with whom the author appears to be very imperfectly acquainted. He discusses chiefly the more or less popular "Zur Lehre vom Transfiniten"; it is doubtful whether he has read the "Grundlagen einer allgemeinen Mannichfaltigkeitslehre," and he appears to have never heard of the very important articles in *Math. Annalen*, volumes 46, 49. He mentions Cantor's sketch of a proof that there are no infinitesimal numbers,¹ which consists in showing that, if there were an infinitesimal number ζ , and if v were any transfinite number, however great, ζv would still be infinitesimal. Dr. Geissler retorts (p. 328): But how if instead of v we were to put a magnitude not obeying the prescriptions for the so-called transfinite numbers? This retort is disposed of by the logical theory of Arithmetic, which proves the impossibility of our author's hypothesis. He objects also that Cantor has not established the existence (in the mathematical sense) of his transfinite numbers. On this point, it is true, the theory requires some supplementing; but what is necessary is easily supplied. It can be proved that every class has a number, and the finite integers form a class, but they have no finite number of terms; consequently they have an infinite number. The doctrine of the transfinite is not merely, as Dr. Geissler is willing to allow (p. 331), one among possible theories of infinity; it can be proved, from the general principles of Logic, to be the only possible theory. To deny this it would be necessary to deny the Syllogism, or the Law of Contradiction, or some equally elementary proposition of Logic.

The last eighty pages are occupied in philosophical considerations, concerning chiefly the doctrine of *Behaftungen*, with which is connected a theory of so-called "metaphysical relativity". This theory maintains

¹Which is expanded and rendered intelligible by Peano, *Rivista di Mat.*, vol. ii, pp. 58-62.

that relations (and in particular ratios) are prior to their terms, and that, given a ratio of two distances or of two periods of time or what not, we can regard the terms of the ratio as finite or as infinite or infinitesimal of any order, the ratio remaining unchanged. The author also distinguishes various degrees of Being, by means of which it is possible to hold at the same time that a thing is in one sense and is not in another, thus solving apparent contradictions. Whatever value may belong to these views on their own account, it is certain that they do not contribute to the solution of the problem of infinity, which has been found without their aid.

The motives which have led mathematicians to turn their subject first into Arithmetic, then into Logic, are very strong, but a serious attack upon this procedure would be valuable. It is to be hoped that Dr. Geissler will give us this in some future work, together with a defence of his own position against the criticisms which naturally occur to the mathematician.

B. RUSSELL.

Das Urteil bei Descartes. Ein Beitrag zur Vorgeschichte der Erkenntnistheorie. Von Dr. BRODER CHRISTIANSEN. Hanau: Verlag von Clauss & Feddersen, 1902. Pp. 107.

Dr. Christiansen adopts the following division of his subject: (1) Analysis of Judgment according to Descartes; (2) Judgment and Truth: the Test of Truth; (3) Judgment and Reality: the problem of Transcendentalism. Under (1) he clearly points out the development that took place in Descartes' view of the nature of judgment from his first treatment of the subject in the *Regulae* where on the whole he conceives judgment as a synthesis of ideas and the negative judgment as a special case of the positive, to his later treatment in the *Meditations*, etc., where he conceives judgment as essentially an act of affirmation or denial, and the negative and positive as distinct kinds of judgment. In these very first pages our author's clear and scholarly manner makes itself felt. Perhaps the only uncertainty his treatment leaves in the mind is as to whether he is right in assuming that when Descartes refers to a synthesis of ideas in the *Regulae* he is really stating his theory of judgment (*cf.* pp. 12, 13 with p. 59, end of § 2). Dr. Christiansen then deals with Descartes' more matured theory of judgment, and after a keen criticism of Brentano's view that judgment, according to Descartes, was an act *sui generis*, concludes that it is essentially an act of will. There is, of course, a theoretical element, the idea, involved in the judgment, but it only serves as object or material for the volitional factor, the act of assent in which the judgment essentially consists. Our author follows up this analysis by an extremely thorough treatment of the two elements involved in judgment, the theoretical (what did Descartes mean by an idea, and by an innate idea in particular?) and the volitional. With regard to the relation between the two in judgment it is important to notice that the intellectual insight which assures us that a certain idea is real or materially true exercises no constraint on the will. The assent of the will to the truth of the idea follows out of its own nature, the will in its purity being essentially a striving after the True and the Good. The intellectual insight is only the 'occasional' cause of the act of assent whereby the judgment is completed. At the same time though this intellectual insight into the true (*das Erkennen*) is in itself no judgment, the judgment (*das Anerkennen*) can only guard itself from error by making an intellectual apprehension of truth the precondition of its assent. The judgment is true (formally) only when the idea assented

to is recognised by the Intellect as true (materially). Hence three factors in a complete act of judgment: the idea judged (*die Urteilsmaterie*), the intellectual perception of its truth (*der Urteilsgrund*) and the volitional recognition of its truth (*der eigentliche Urteilsakt*). At the close of a remarkably able discussion of the *perceptio clara et distincta* Dr. Christiansen sums up the process of judgment in its completest form as follows: The Intellect supplies in the first place the idea, the matter of the judgment, but in no way determines the will to judge. Then the will, in the form of Attention concentrated on the idea and on the interconnexion of its component elements, incites the intellect to a consciousness of the valid grounds of the judgment; once the clear and distinct perception of the idea is thereby reached, the decision necessarily follows in accordance with an innate tendency of the will. If we proceed to ask how we are to gain objective assurance of the clearness and distinctness of our insight Descartes answers that such assurance is the natural product of that long discipline of doubt whereby all that obscures the natural light of reason—rooted prejudices and unmethodical ways of thinking—is sifted away. The last section deals with the difficulties which Descartes' rationalism meets so soon as it forsakes the truth-mark of necessary connexion for that of a conformity of thought with its object. Descartes concedes that the existence of finite external object cannot be grasped by us in a purely intellectual way. Finally, he is thrown back for his ultimate guarantee of truth upon the arbitrary will of God. Rational Knowledge is thus found to be rooted in the irrational.

It would be hard to overpraise this pamphlet. Fine distinctions and criticisms freshen the work from beginning to end. Though our author's conclusions are in no sense revolutionary they are developed with marked originality, conspicuous clearness and convincing thoroughness. It is the work of an efficient scholar and cannot be too cordially recommended. If translated, it would furnish a model Honours text-book for the student of Descartes.

W. R. BOYCE GIBSON.

Ethik. VON MAX WENTSCHER. I. Theil. Leipzig, 1902. Pp. xii., 368.

The present volume deals only with the fundamental questions of ethical science, the nature of its subject-matter and methods, and its ultimate metaphysical presuppositions, all discussion of special rules and problems of conduct being postponed to a forthcoming second part. Mr. Wentscher treats of the venerable topics to which his book is devoted with a pleasing freshness and individuality none too common in works on Ethics. His leading idea is well indicated by the quotations from Kant and Nietzsche which appear as mottoes on his title-page. The one indispensable pre-requisite of Ethics is the recognition of the reality of human freedom. So far the author is in fundamental accord with Kant whom he regards, in spite of shortcomings and obscurities, as the founder in modern thought of a genuine moral philosophy. He rejects, however, Kant's unfortunate metaphysical interpretation of freedom as a possession of an imaginary "noumenal self". Freedom, to be of practical value, must belong to the self of actual experience. To be free means to be capable, by individual intellectual reflexion, of emancipating one's acts from the influence of mere habit, unsystematised impulse, and social tradition, and making one's life into the conscious expression of self-chosen purpose. Freedom is thus not irresponsible

liberum arbitrium, but self-determination, and is identical with individuality of character. These results, closely identical with the doctrines of our recent English "idealists," are reached along lines of reasoning mainly based upon acute observation of historical and psychological fact, and scarcely dependent at all on the metaphysical constructions of post-Kantian philosophy. To some of us they are perhaps all the more satisfactory in consequence.

Mr. Wentscher's affinity with Nietzsche comes out in his interpretation of Freedom as at once the end and the presupposition of Ethics. For a free agent the ultimate ideal must be freedom itself, the actual exercise of a will which is the expression of self-determining character. Freedom is thus the same thing as the highest possible development of the individual will, and we must say with Nietzsche, "Will maketh free; this is the true doctrine of will and freedom". Freedom is thus not an initial datum or endowment of human nature; in the original capacity to reflect on our acts, we have merely a predisposition towards freedom; freedom itself has to be won by the actual habitual exercise of self-determined volition.

Mr. Wentscher's book falls into two principal parts. In the first, after a brief introduction which identifies the subject-matter of Ethics with the phenomena of conscience, he analyses the processes of conscience themselves. The general outcome of his analysis is to distinguish three main influences which determine the self-approbation and self-censure of individuals in various proportions at various levels of culture. Approbation is bestowed first and with least conscious reflexion on the qualities which give the individual an enhanced sense of power and importance (the *noble* values of Nietzsche), next, under the influence of social tradition, on qualities which are found *useful* to the community at large (the *utilitarian* values), finally, where systematic individual reflexion has set in, on all that extends and develops the individual's power of free self-determination. The individual's approbations and censures of this last reflective kind constitute the "intellectual" conscience. Examining the various attempts of ethical theory to formulate ultimate moral axioms for the guidance of the intellectual conscience, the author rejects the claims of empirical Eudæmonism to prescribe principles for conduct. He decides that ethical axioms can only be obtained by an *a priori* idealistic method, and argues at length that the various ideals of individual perfection, social equity, etc., are all special modifications of the general principle that a potentially free being should aim at the highest development of a true individuality. In the second part of the volume the author discusses the various objections brought against the concept of free agency by the various types of determinism, and seeks to show their fallacious character. He is usually felicitous in his criticism of the determinist assumption, but one may perhaps suggest that it is a weakness in his treatment of the subject that he is willing to admit the domination of rigid causal uniformity, as actual, *except* in the ethical sphere. One would have liked some examination of the whole idea of "causal law". Until we have discussed the claim of the causal scheme to give truth anywhere, it is a doubtful assumption that moral freedom means the exemption of human conduct from conditions elsewhere valid.

A. E. T.

GUIDO VILLA. *Einleitung in die Psychologie der Gegenwart; nach einer Neubearbeitung der ursprünglichen Ausgabe aus dem Italienischen übersetzt.* Von CHR. D. PFLAUM. Leipzig: Teubner, 1902. Pp. viii., 484.

Signor Villa is to be warmly congratulated on the excellent German translation of his important work *La Psicologia contemporanea*, a notice of which appeared in this journal two years ago. As stated above, the original has undergone considerable revision—an arduous, not to say irksome task, but carried through with successful energy and discernment. The superabundant bulk has been reduced by more than one quarter. The materials have been here and there re-arranged, and here and there developed and enriched. In particular, the second part of chapter iv., 'I metodi di esposizione,' has been detached, and forms, as chapter vii.: 'The synthesis and evolution of mental life,' a fitting sequel to the analysis of the three phases or functions of mind in chapter vi. The range of the work is now very complete, the translator having contributed a sketch of contemporary Russian psychology, and immensely enhanced its serviceableness besides by name and subject indices, by page headlines and by a lucidity of style not inferior to that of the original. Those who cannot follow even lucid German may await in hope the appearance of an English translation, which is now, I believe, in process under the author's supervision. In view of this and of other future editions, one or two minor matters may be pointed out. In the historical survey of English thought, Hobbes should find a place (to whom in far narrower compass Prof. Höfding's *Psychology*, e.g., does justice). And in so catholic a work, mention might be made of original departures like that of M. Arrét's monographs "Psychologie du Peintre," etc., and of M. Le Bon's "Psychologie de la Foule". A slight trace of imperfect revision seems apparent on page 393, where the promise of fuller treatment in the concluding chapter, now purged of re-arranged matter, is no longer kept. In this chapter, now containing an admirable *résumé* of results established by modern psychology, one line perhaps might benefit by modification. The phrase (p. 471, l. 10) . . . 'obwohl sie nichts mit dieser zu thun hat,' referring to psychological reality v. material reality, may be true in a way. But in view of the author's preceding expositions of thoroughgoing Parallelism, and, in particular, of the "very relative independence of psychical and physical sequences" (p. 458), the line given above, if quoted without context, might render him as liable to be misunderstood as the Bible or a politician's speech. Finally, it would be of special interest to English readers, and of general historical value, if so cultured a Wundtian and so discerning a critic were to juxtapose his discussion of British "psychology without soul," and of the conversion in Germany from the *Substanzbegriff* to some form or other of the *Aktualität aller psychischen Thatsachen*, and estimate how far there is agreement in all but words.

C. A. F. RHYS DAVIDS.

Estetica come Scienza dell' Espressione e Linguistica Generale. Da BENEDETTO CROCE. Milano, 1902. Pp. xx., 550.

Less than a third of this volume is occupied with the theory and the remainder with the history of æsthetics. Æsthetic experience is, according to the author, cognitive, coinciding with intuitive as distinguished from conceptual knowledge. Stated otherwise, it is the consciousness of an image which may or may not correspond to an objective reality. To

perceive an object, to call a work of art into existence, and to speak are identical processes. In each of them we convert an impression into an expression. Unfortunately, the author has not taken the trouble to analyse the notion 'expression' or to distinguish the various processes to which the word can be applied. In simple perception the raw materials of sense are sifted out, ranged in a certain order of space and time, and associated by contiguity or resemblance with other resuscitated sensations. Any one who likes may, of course, call the mental activity involved in this process expression instead of perception; but to identify it with what is called catching the expression of a face, and on the strength of this equivalent to describe both activities as æsthetic facts is merely misleading. For the expression of a face means its power of suggesting mental qualities to the beholder, which is not *in pari materia* with the suggestion, say, of tactual by visual sensations. And the case is worse when we come to language, where auditory or visual impressions are converted into signs of concepts.

In the historical portion of the book the most original point seems to be the prominence given to Vico, whom Signor Croce considers 'the first discoverer of æsthetic science'—a wonderful criticism, not in the least justified by what the author himself quotes from the *Scienza Nuova*.

A. W. B.

W. Wundt's Philosophie und Psychologie in ihren Grundlehren dargestellt von Dr. RUDOLF EISLER. 8vo. Leipzig, 1902. Pp. vi., 210. Price, M. 3 20.

Within certain limits an admirable abstract of the method, principles and conclusions of Wundt's philosophical system. It is indeed to be regretted that Dr. Eisler has so severely restricted the scope of his book, and more especially that, for reasons of space and in consideration of E. König's recent work, he has omitted any but the most general treatment of Wundt's ethics, an omission that naturally results in a certain incompleteness. Criticism is scarcely attempted, though the few critical remarks that are inserted make one wish for more. But, so far as it goes, this book deserves all praise. It keeps, perhaps, too close to the details of the original to serve as an Introduction; but it cannot fail to be of service to those who have studied Wundt already, since it brings together connected topics that are scattered through numerous lengthy volumes and makes possible a rapid survey of the whole field.

T. LOVEDAY.

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- G. Cimbali, *Saggi di Filosofia Sociale, E Guiridica*, Roma, Bocca, 1903, pp. ix., 279.
- G. Salvadori, *L'Etica Evoluzionista*, Torino, Bocca, 1903, pp. viii., 476.
- G. Portigliotti, *Psicoterapia*, Milano, 1903, pp. xi., 317.

VII.—PHILOSOPHICAL PERIODICALS.

PHILOSOPHICAL REVIEW. Vol. xi., No. 4. **E. B. McGilvary.** 'The Consciousness of Obligation.' [We may accept Kant's distinction between the hypothetical and categorical imperatives. Corresponding to the former is the consciousness of conditional or teleological obligation; corresponding to the latter is that of absolute obligation. (1) The consciousness of teleological obligation has reference to the relation objectively existing between an action, its known result, and the desiderative attitude the agent takes towards that result. We say to ourselves: Do this, because you want that. In analytical terms: "the reasoning process of a person with a definite desiderative nature takes place in a concrete situation, and produces a result, of which a definite desire in its particular strength is a part. Such a desire is therefore properly called a concretely reasonable desire." The function of ideals: there is nothing peculiar about the obligation imposed by an ideal, that should differentiate it from other teleological obligations. (2) Kant's definition of the categorical imperative cannot be accepted; for there are imperatives which are taken "by human beings as unconditionally binding on them, and yet which are not 'objectively necessary' in the sense of being 'valid, not merely for men, but for all rational creatures generally'". The categorical imperative is "a consciousness of unconditional obligation which in normal cases has reference to some more or less definitely conceived action or disposition, but which only in certain instances is regarded by the subject experiencing it as binding" in the Kantian sense. It is due, in some small measure, to the economy of mental short-hand, the reason dropping out of the command; but chiefly to the 'suggestive' influence exerted by the word of command as such. (3) In sum, then, there are the analytically teleological imperative, which is reasoned; the analytically categorical but genetically teleological imperative, which has been reasoned; and the analytically and genetically categorical imperative, which never was reasoned.] **J. Dewey.** 'The Evolutionary Method as Applied to Morality. II. Its Significance for Conduct.' [The genetic method "unites the present situation, with its accepted customs, beliefs, moral ideals, hopes and aspirations, with the past. . . . Whatever can be learned from a study of the past is at once available in the analysis of the present." The method "eliminates surds, mere survivals, emotional reactions, and rationalises (so far as that is possible at any given time) the attitudes we take, the ideals we form". Both empiricism and rationalism, in different ways, deny the continuity of the moralising process; their ultimates are timeless, and hence absolute and disconnected. "If our moral judgments were just judgments *about* morality," the results of the historic method "might be of scientific worth, but would lack moral helpfulness, moral helpfulness. But moral judgments are judgments of ways to act, of deeds to do, of habits to form, of ends to cultivate. . . . To control our judgments of conduct . . . is in so far forth to direct conduct itself."] **W. Smith.**

'The Metaphysics of Time.' ["Neither psychology nor metaphysics warrants the retention of the concept of time taken in the sense of succession. What we call time is a representation made up of space and certain sense factors by means of which we picture the order in experience which is not temporal, but may, for want of a better term, be called logical. The truth of change is to be found not in the transition from being to nothing and from nothing to being, but in the infinite diversity of finite experiences."] *Reviews of Books. Summaries of Articles. Notices of New Books. Notes.*

PSYCHOLOGICAL REVIEW. Vol. ix. No. 4. **J. R. Angell.** 'Studies from the Psychological Laboratory of the University of Chicago.' **H. J. Pearce.** 'Experimental Observations upon Normal Motor Suggestibility.' [When we localise a single stimulus (visual, auditory or tactual), we ordinarily make an error in the direction of the point upon which attention is turned at the time of the application of stimulus; the error increases largely with distance of stimulus from point of attention. If a second similar stimulus is given, there is a tendency to resist its suggestion; but as the applications are repeated, the suggestion becomes increasingly effective, causing an error in the direction of the second stimulus. The resistance to this form of suggestion is most vigorous when the direction of suggestion is opposed to that of the normal error tendency; ultimately, however, such an antagonistic suggestion is most effective. Variations of intensity and distance of the suggesting stimulus are followed, within limits, by corresponding variations in result. The suggestive power of the distractor is approximately the same in all three sense departments.] **E. A. McC. Gamble.** 'From the Wellesley College Psychological Laboratory: The Perception of Sound Direction as a Conscious Process.' [Perception of the direction of a telephone click is not usually based upon consciousness of timbre, intensity, pitch, or any kind of place-mark or space-value in the sound itself. Timbre and intensity criteria develop with experience in auditory localisation, and seem in a measure to presuppose it. Cutaneous impressions about the head and ears sometimes serve as localisation factors. Auditory localisation at large is a rough counterpart of cutaneous localisation; it proceeds originally by reflex head and eye movements, which drop out with practice. As evidence collateral to that derived from the experiments, the author reminds us (1) that suggestion has no marked effect on strong tendencies in the perception of direction; (2) that it hinders accurate localisation, as thought will hinder an automatic muscular co-ordination; (3) that unpractised observers tend to localise sounds behind them,—the relic of a serviceable reflex; and (4) that alleged immediacy of localisation is coupled with relative accuracy.] **A. A. Aikens, E. L. Thorndike, E. Hubbell.** 'Correlations among Perceptive and Associative Processes.' [Measurement of relationships "in the case of a number of functions, all of which depend upon quickness and accuracy in associating certain thoughts or acts with certain percepts, either directly, or indirectly through other ideas which the percepts call up". Marking of misspelled words, of words containing certain letters, writing of antithetical words, working of additions, etc. Table of correlations.] *Discussion and Reports.* **B. Bosanquet.** 'Imitation.' [How are we to explain the transference and operation of ideas by which men are social? Baldwin says, 'imitation'; the writer, 'logic'. "I cannot see how development into a group of interrelated elements . . . can be got by imitative process proper. . . . I do not believe that an explanation of logical process can be built up on imitation *plus* selection, and the facts seem to me to be in the main omitted by the imitation

theory." **J. H. Hyslop.** 'Mr. Sumner's Review of the Piper Report.' [Reply to criticism.] Psychological Literature. New Books. Notes.

PSYCHOLOGICAL REVIEW. Mon. Suppl. No. 16. **C. Wissler.** 'The Correlation of Mental and Physical Tests.' [Description of tests: size of head, strength of hand, fatigue, perception of size, eyesight, colour vision, acuity of hearing, perception of pitch, of weight or force of movement, sensation areas, pain, colour preference, reaction time, rate of perception, naming colours, rate and accuracy of movement, rhythm and perception of time, association, imagery, memory. General results: the laboratory mental tests show little inter-correlation in the case of college students; the physical tests show a general tendency to correlate among themselves, but only to a very slight degree with the mental tests; the marks of students in college classes correlate well with themselves, but not with the tests made in the laboratory.]

AMERICAN JOURNAL OF PSYCHOLOGY. Vol. xiii, No. 2. **A. J. Kinman.** 'Mental Life of Two *Macacus Rhesus* Monkeys in Captivity.'—II. [Number tests: the numbers 1, 2, 3 are clearly discriminated; 4, 5, 6 are seen as a somewhat definite mass; beyond 6 we have no measured quantity, but only an indefinite mass or group. Maze tests confirm previous conclusions, but throw no new light on intelligence or processes of learning. Indications of associative memory. Smell is not acute, the preponderating sense being sight. Individual differences are apparently as great as they might be between two human individuals chosen at random. Imitation, general notions, reason: the paragraphs which report these tests are properly prefaced by logical analyses of the terms themselves. The monkeys showed mimicry (which lies below the imitation level); instinctive imitation, or automatic behaviour; and, in two instances, imitation of the persistent and intelligent types. "Neither has imitated any of my acts. . . . The male has rarely done anything that could be regarded as an imitation of the actions of the female. The female, however, has imitated the male." The monkeys apparently had individual representations of percepts and generic images; intermediate abstractions, with bodily positions or calls as their signs, may have been present; such abstractions and higher concepts, requiring the use of language, are wholly wanting. Again, the monkeys showed evidence of implicit reasoning, immediate inference and adaptive intelligence; the author inclines, tentatively, to admit that they are capable of analogical reasoning; rational thinking and formal reasoning are beyond them. Appendix: habits and characteristics of the *Macacus Rhesus*. Bibliography.] **G. M. Whipple.** 'An Analytic Study of the Memory Image and the Process of Judgment in the Discrimination of Clangs and Tones.' II.—[Experiments by the method of reaction or of continuous change, the essential feature of which is the use of a continuously sounding variable, moving up or down towards the standard at a uniform rate, until arrested by the observer at the point of subjective equality. Results: some observers can classify and identify the standards in use by auditory-verbal, visual and other associative supplementing, and thus gain indirect aid in their reactions: the variable seems to move by stages, regular or irregular, which may be visualised; the direction of movement may evoke distinct emotional preferences; it is frequently misinterpreted, even in the procedure with knowledge: the method and basis of decision are individual matters, though certain types can be made out: there is a strong error of expectation, increasing generally as *D* increases: no observer can say definitely that a reaction is correct; there is an area, rather than a point, of equality: knowledge of the position of a coming

variable has little effect upon the quantitative results; it merely gives a feeling of security to the observer: a long time interval gives irregular quantitative results, owing largely to its destructive effect upon the image: distraction renders the identification of the standard and the apprehension of the position of the variable unusually difficult; complete distraction means attention to the variable and reaction without reference to an image: practice lessens the *m. v.*, and unifies the course of the reaction consciousness for each observer, while accentuating individual differences: observers who excelled in the discrimination of discrete tones without the use of auditory imagery find the reaction to auditory equality best accomplished by keen attention to the standard and the use of an auditory image as basis of reaction. Miscellaneous tests: tracings of respiration, drawings of movement of variable tone, recognition-times in immediate judgments. The nature and course of the image: the memory image of a tone is not a tonal memory image, but that and much more; temporal course of the auditory image proper; tendency to flat, and its correction; effect of practice on serviceableness of image; habit of imaging and its relation to distractors. The structure of the judgment consciousness: auditory image unnecessary to judgment, whether of difference or of equality; it may be present and yet not mediate comparison; it may be an essential component of the judgment consciousness; analysis of imageless judgments.] **I. M. Bentley.** 'The Psychology of Mental Arrangement.' [Critical study of the work of Mach, Ehrenfels, Meinong, Cornelius, Witasek, Schumann, Lipps, Stout. The discussion shows (1) that one cannot draw a hard and fast distinction between sense and intellect, received content and mental creation, and (2) that "a complete descriptive account of a mental complex demands more than an enumeration of its constituent elements taken as isolated units". The author rejects the principle of consolidation. "The two concepts to conjure with are the concepts of analysis and attention." "The essential nature of a complex is determined, not by a funded or formal factor, but by the character of the elements themselves, the connexions into which they fall, and the state of attention in which the complex is given."] **J. W. Slaughter.** 'The Moon in Childhood and Folklore.' [Study based on questionnaire material collected by G. S. Hall. Substance, distance, etc.; connexion with weather; the man in the moon; the moon and morals; place of departed; effect of phases; moon worship; emotional reactions; the moon of science.] Literature.

INTERNATIONAL JOURNAL OF ETHICS. Vol. xiii, No. 1. **W. L. Cook.** 'Criticism of Public Men.' [Criticism improves the characters of statesmen by bringing the public standard of morality to the same pitch as that of private life.] **A. Fouillée.** 'The Ethics of Nietzsche and Guyau.' [A comparison and criticism.] **W. D. Morrison.** 'The Professional Criminal in England.' [A criticism of recent articles by Sir R. Anderson, with a plea for mild treatment of criminals.] **R. B. Perry.** 'The Practical Consciousness of Freedom.' [A vindication of free-will based on the practical conceptions of duty and responsibility. Belief in the reality of freedom involves belief in the reality of temporal change.] **A. E. Taylor.** 'Mind in Nature.' [An argument for the universal presence in the natural world of a conscious element which is not indifferent to man's ethical interests, as opposed to the mechanical view of exact science.] **Ida M. Metcalf.** 'The Pampered Children of the Poor.' [Strictures upon the methods and general spirit prevalent in the elementary education system of the United States.] Book Reviews.

REVUE DE MÉTAPHYSIQUE ET DE MORALE. No. 6. Novembre, 1901.

A. Fouillée. 'Les deux directions possibles dans l'enseignement de la philosophie et de son histoire.' [The 'two directions' are (1) 'deterministic monism,' (2) 'indeterministic pluralism'; but M. Fouillée's classification seems extremely vague and arbitrary. He is himself a partisan of (1), which, he tells us, (a) is 'synthetic and conciliatory,' believing that reality has more 'sides' than can be exhausted by any system of 'concepts'; (b) believes that the laws of 'identity' and 'causality' have no exceptions: yet (c) to deny 'that there are intelligible reasons for a choice' is to deny 'the law of causality,' and (d) to believe in 'causality' is not to believe in 'fatal laws' or 'mechanical necessity'; on the contrary, 'the final question' is not between 'determinism' and 'contingence,' but between the true 'idealistic' and the false 'mechanical' determinism, the former holding that 'the internal foundation of all things is an ever-active will, intelligent or capable of becoming so, which tends to independence and liberty': indeed, M. Fouillée himself insists that by 'law of causality' he only means 'the principle of intelligibility, *under whatever form* it be represented,' (2) on the other hand, is identified with 'French criticism' and 'the so-called new "critique,"' to which M. Fouillée objects, (a) that 'it believes it can measure everything with its standard, which is the principle of contradiction,' and hence is 'narrow and exclusive'; (b) that it assigns 'primacy' to 'activity,' which is 'a confused and bastard notion'; (c) that hence 'it puts at the basis of knowledge' 'contingence,' which is 'another pseudo-idea, without any possible definition,' and is purely 'negative,' but of which the 'positive and true' part consists in the truth that there are 'infinitely more causes than we can see and conceive,' and that hence reality is 'determined' in other ways as well as 'by mathematical and mechanical necessities'; (d) that its 'irrationalism' leads to the immoral doctrines of Nietzsche.] **V. Brochard.** 'L'éternité des âmes dans la philosophie de Spinoza.' [Quotes passages from Spinoza tending to show that, although only the 'essence' of our souls is eternal, yet these essences are (a) distinct 'individuals' or 'persons' (M. Brochard identifies these terms); (b) 'conscious' and 'self-conscious' (M. Brochard scarcely distinguishes these points from (a) or from one another); (c) 'actual,' 'true' and 'real': in short, that the 'we,' whom Spinoza asserts to be eternal, differ from our present selves only by the absence of 'memory and imagination' and of 'existence in relation to a particular time'. This doctrine was influenced by Aristotle's, but differs from it, in that Aristotle's *νοῦς ποιητικός*, which is alone immortal, is not the 'form' of any particular body and hence is not the 'individual soul'; and this difference is due to the influence of Plotinus (through the 'Arabian scholastics'), who holds that each man differs 'specifically' (*κατ' εἶδος*) from every other, and hence attributes to each individual soul the eternity which belongs to each of Plato's 'ideas': this view of Plotinus involves his conceiving the universal 'soul' and 'intelligence,' in which, respectively, all these distinct 'souls' and 'ideas' are eternally contained, as 'infinite'—a conception of the Deity which neither Plato nor Aristotle thought possible, and which is of Jewish origin. Finally, Spinoza differs both from the Greeks and from Plotinus, under Cartesian influence, in that he denies soul to be a 'moving cause' of matter. There is reason to think that even Spinoza's God is 'a consciousness and personality'.] **C. Dunan.** 'Les principes moraux du droit.' [An article the utter worthlessness of which is sufficiently illustrated by its first section. I. begins by quoting from Leibniz a definition of 'droit' = 'rights' as distinguished from 'duty'; immediately tells us that this definition *only* expresses the distinction between 'what ought to be' and

'what is'; says that this latter distinction is universally recognised; identifies such recognition with the admission that 'reason,' as distinct from 'brutal fact,' is not an 'empty word' and does 'exist'; and finally concludes that 'as all possible theories of reason may be reduced to two, empiricism and idealism,' the problem 'what right is' admits of two and only two solutions, the empirical and the idealistic. In II. M. Dunan professes to show that 'Hobbes' theory' (taken as representative of empiricism) is untrue; but, since he identifies throughout the most obviously diverse propositions, it is impossible to discover precisely what he does hold to be untrue. In III. we find (in contradiction to I.) that 'empirical philosophy' is 'only acquainted with facts,' and hence naturally could not solve the problem. To demand a solution from idealism 'means' that right is only an 'absolutely necessary' 'idea'; and the solution is that 'reason renders all persons, *quâ* persons, perfectly equal to one another'; or that 'right is unity and identity in God of all reasonable beings'; or that 'right is diversity but equality of persons before human consciousness'. IV. 'Right is not, but wishes to be,' and, for the attainment of its wish, it must (1) become 'definite' 'for each individual'; (2) 'find in the world of facts a force with the will and power to support it'. Condition (1) necessitates the substitution of 'positive' for 'ideal' justice, since the latter is 'impossible either to conceive or to realise'. The State fulfils condition (2); yet its legislative 'intervention' cannot be justified by its mere utility, but only by the fact that every one obeys it voluntarily, which is the case, since every one wishes 'social life,' and therefore also the obedience which is a means to it. V. War is not constituted by open violence but by any endeavour of two parties to secure incompatible objects 'without caring to observe justice, and when nobody can impose it on them'. Against Hegel's praise of war between nations is urged (a) that the better nation *might* be found not always to win; (b) that the argument 'war is justified as a means to the survival of the very qualities which cause victory in war' is a 'vicious circle,' and necessitates the inference that the utility of these qualities consists in the production of war, just as that of war consists in their production! Hence there should be an 'international institution' to enforce justice, although a 'peace imposed from without' might have ruinous effects! 'And besides,' 'competition' is sufficient to ensure the 'pre-eminence of the best,' and is always 'kept within the bounds of justice'!] **A. Landry.** 'Quelques réflexions sur l'idée de justice distributive.' [A refreshing contrast to M. Dunan. Will only consider what principles ought to guide the State in the distribution of 'economic goods,' not *e.g.*, of honours, etc. I. Removes misunderstandings about the nature of the 'impartiality' which is essential to justice: different people must be treated in the same way unless 'a different treatment can be justified by the same principle' which justifies the general rule of treatment; a just 'equality' does not require that every one should be in the same circumstances, but only that, *if* they are, they should be treated alike. But this 'essential element' of justice is 'formal': it only tells us to apply *some* principle impartially; the question 'What principle?' may be answered generally by 'Promote the public good'; but this 'end' includes many different ends, and it is plain *a priori* that we can only decide *approximately* what method of distribution will best promote the whole. II. What end do the ordinary formulæ of distributive justice imply? These are: (1) To each in proportion to his services; (2) to each in proportion to the quantity of his labour; (3) to every man the same; (4) to each in proportion to his needs. (1) and (2) are mainly means of maximising the amount of 'economic goods' produced; whereas we tend

to hold (3), because we see that the wealth of the rich produces less 'well-being' than would the same amount distributed among many poor, and (4) because more wealth is necessary to produce the same sum of 'well-being' in some than in others, *i.e.*, both aim at that distribution of economic goods which is 'best in itself'. Thus the end implied in all four is 'to bring to a maximum that well-being which the enjoyment of exchangeable goods procures,' *not* the promotion of moral, intellectual or æsthetic excellence. The adoption of this end as the standard of distributive justice shows that it is regarded as the 'most important end'; and it is rightly so regarded, since it is both a necessary condition for, and itself (to some extent) inclusive of, the rest. III. That justice is commonly thought to require a different distribution from that which is of 'social utility' is due to its identification with what 'social utility' would require, if conditions were different (*e.g.*, if people were not generally lazy and selfish); and private may follow a different rule from public justice (*e.g.*, 4 instead of 1), just because it can see whether a particular man is an exception to these general conditions.] *Études Critiques. Enseignement. Table des Matières. Supplément. 10^e Année, No. 1, Janvier, 1902. L. Conturat. 'Sur la métaphysique de Leibniz' (Avec un Opuscule Inédit). Xavier Léon. 'La philosophie de Fichte et la conscience contemporaine.' J. Wilbois. 'L'esprit positif' (suite). Discussions. Enseignement. Supplément. No. 2. Mars, 1902. J. J. Gourd. 'Le sacrifice.' H. Delacroix. 'L'art et la vie intérieure.' A. Landry. 'La responsabilité pénale dans la doctrine utilitaire.' H. MacColl. 'Logique tabulaire.' Discussions. Études Critiques. Enseignement. Questions Pratiques. Supplément. No. 3. Mai, 1902. H. Poincaré. 'Sur la valeur objective de la science.' F. Evillin. 'La dialectique des antinomies kantienues.' Ch. Dunan. 'La division des devoirs.' J. Wilbois. 'L'esprit positif' (suite). Études Critiques. Questions Pratiques. Supplément.*

REVUE NÉO-SCOLASTIQUE. No. 30. J. Halleux ('L'Hypothèse évolutionniste en Morale,' *suite et fin*) resumes and completes his criticism of Mr. Spencer's account of the relation of evolution to morals. Mr. Halleux argues (1) that in grouping indifferently under the name of moral conduct all the actions of man and beast which tend to the conservation and development of life Mr. Spencer has lost sight of the true characteristics of morality; (2) that the law of evolution determining the parallel progress of structure, function and conduct is far from being as absolute as Mr. Spencer thinks; (3) that though it is true to say that man tends to happiness by an essential law of his being, Mr. Spencer has quite misapprehended the true import of this tendency; (4) that Mr. Spencer's strictures on those moralists who seek for the distinction of good and evil elsewhere than in the nature of things have no bearing on theological morality. He further criticises Mr. Spencer's considerations of conduct from the physical, psychical, biological and sociological points of view. G. Legrand ('La renommée posthume d'Alfred de Vigny') inquires into the causes which have led to the recent revival of interest in the writings of Alfred de Vigny. De Vigny was a romanticist and a realist, but, above all, he was a symbolist, and it is to the symbolical character of his works that the present revival is due. M. De Wulf ('Augustinisme et Aristotélisme au XIII^e siècle') refuses to pass the list of Augustinian elements in the earlier form of scholasticism as drawn up by P. Mandonnet, according to whom the absence of a formal distinction between philosophy and theology; the superiority of the good to the true, and the analogous superiority of the will to the intelligence in both God and man; the need of a special illumination from God for the accomplishment of

certain acts of mind, the positive actuality, though of a very low order, of *materia prima*—independently of all substantial information; the presence in matter of the principles or seminal causes of things; the hylomorphic composition of spiritual substances; the multiplicity of forms and the individuality of the soul independently of its union with the body, more especially in the case of man's, were of Augustinian origin. Some of these doctrines had no place in the Augustinian system, while others were totally opposed to that system. **C. Plat** ('Dieu et la Nature d'après Aristote') indicates the excellences as well as the defects of Aristotle's conceptions of God and nature.

ZEITSCHRIFT FÜR PSYCHOLOGIE UND PHYSIOLOGIE DER SINNESORGANE. Bd. xxix. Heft 2. **J. von. Kries**. 'Ueber die im Netzhautcentrum fehlende Nachbilderscheinung und über die diesen Gegenstand betreffenden Arbeiten von C. Hess.' [Reply to criticism: discussion of methods and restatement of result. The fact which forms the point of departure for the rod-theory (that "oftentimes lights, which under certain conditions—high absolute intensity and bright-adapted eye—appear alike may, under other conditions—small intensity and dark-adapted eye—appear totally different"), i.e., the unlikeness of the twilight-values of bright-equivalent lights, has been taken into account by the Hering school only for the trichromatic organ, where it is not striking; they have neglected its importance for the dichromatic eye and the extreme periphery of the normal retina. Tschernak's explanation, even so far as he goes, is entirely unsatisfactory.] **C. Hess**. 'Weitere Untersuchungen über totale Farbenblindheit.' [The hypotheses put forward by von Kries in explanation of total colour blindness are not in accord with the facts. For (1) in uncomplicated cases there is no central blindness in the visual field. (2) There is a diminution of central sensitivity in the dark-adapted eye, as there is for normal eyes; there is no such diminution in bright-adaptation. (3) There is no long after-effect of stimulation. (4) The defects of vision in bright illumination cannot be accounted for by a high degree of local adaptation and a long-continued after-effect. (5) The patients' dislike of light tells against von Kries. And (6) the course of excitation after momentary stimulation is the same (colour apart) for the totally colour blind as for the normal eye; not two bright phases (von Kries) but three are seen.] **W. A. Nagel**. 'Erklärung zu der vorstehenden und einer früheren Arbeit von C. Hess über totale Farbenblindheit.' [The 'earlier work' is the paper 'Bemerkungen zur Lehre von den Nachbildern und der totalen Farbenblindheit,' *Arch. f. Augenheilk.*, xlv. Hess has misinterpreted and misrepresented von Kries' doctrines.] **A. Samojloff**. 'Einige Bemerkungen zu dem Aufsätze von Dr. E. Storch: Ueber die Wahrnehmung musikalischer Tonverhältnisse.' [Storch's statement that the memory-images of laryngeal adjustments are the substrate of all musical thinking is by no means new: cf. Lotze, Müller, Stricker, Stumpf. Storch's tone spiral had also been anticipated by Opelt, Drobisch and Mach.] Literaturbericht.—Not a very inspiring number! Heft 3. **M. von Frey** und **R. Metzner**. 'Die Raumschwelle der Haut bei Successivreizung.' [Where the separate excitation of single pressure points is possible, adjoining points can always be recognised as different, under suitable conditions of experimentation, with successive stimulation. Discrimination is a function of the intensity of stimulus, and also of the interval elapsing between the two applications; it is easiest when this interval is about $1\frac{1}{2}$ sec. It cannot depend on local signs, in Lotze's sense, since the given difference is always qualitative; localisation may be based upon this qualitative distinction, but is more difficult and uncertain.]

We must therefore assume 'recognition marks' as prior to 'local signs'. The limen of direction (the least distance between stimuli that gives a certain judgment of their relative positions) is about twice as large as the successive limen.] **E. von Oppolzer.** 'Grundzuge einer Farbentheorie. I. Allgemeine Grundlagen.' [(1) All our colour sensations are resultants of the fusion of at least two 'elementary sensations,' corresponding to an excitation of a single opticus fibre. The elementary sensations are not colour sensations (like the red, green and violet of the Helmholtz theory), but brightnesses. Their fusion gives differences of intensity and of composition; and these differences (*cf.* timbre in the tonal sphere) condition our actual colour sensations. Three such elementary sensations are adequate to account for the phenomena of colour vision. Colours are most saturated when the intensities of the three elementary sensations are as 1 : 2 : 3 (in dichromatic systems, when the two intensities are as 1 : 2). They thus owe their existence to an 'innere Gegensätzlichkeit' of the three elementary intensities. (2) Colour perception: an attempt to correlate the three elementary sensations with structural differences in the outer members of the cones. (3) Fechner's Law: derivation of Fechner's constant; influence of the idioretinal light; relation of intensity of a mixed light to the intensities of its components.] **J. Volkelt.** 'Der ästhetische Werth der niederen Sinne.' [We must distinguish between the sensations which constitute the æsthetic object, and those which belong to the subjective attitude of æsthetic enjoyment or appreciation. We must distinguish also between sensations actually present, and their reproductions. How far, now, do real sensations from the lower senses constitute or help to constitute the æsthetic object? Opinions differ widely. It is clear that sight and hearing have two great advantages: they are less material, their stimuli do not directly involve a knowledge of bodily affection; and they are sharply grouped, definitely and significantly arranged. Can the lower sensations, which lack these advantages, still play any part in the æsthetic impression? Smell can, in natural and in artistic beauty (flowers; the artistic arrangement and decoration of a hall for a spring festival). Taste can, in natural beauty (the taste of fruit in an orchard); and so can temperature. Touch,—perhaps; but only exceptionally. Finally, reproduced sensations from the lower senses have three functions: as constitutive of the sensory aspect of the æsthetic object, as associatively connected with the visual or auditory presentation of the object, and as factors in the subjective experience induced by the object.] Literaturbericht.

ZEITSCHRIFT FÜR PHILOSOPHIE UND PHILOSOPHISCHE KRITIK. Bd. exx., Heft 2. **Jul. Bergmann.** 'Ueber den Begriff der Quantität' (Schluss). [After defining in a former article all quantities whose magnitude can be numerically determined (both continuous and discrete) as 'numbers of things,' Bergmann subjects to a searching criticism a doctrine of Kant's which might be quoted against him. He then proceeds to consider in what sense his definition is applicable to certain categories of quantity where at first sight it seems inadmissible: intensity of quality, velocity and acceleration, probability, and the curvature of lines. All these are quantities since they admit of more or less; but how can they be called numbers of things? A line is made up of shorter lines, a surface of smaller surfaces, a weight of lesser weights, but red of a certain degree of saturation cannot be analysed into less saturated reds, nor a given velocity into slower speeds, etc. The solution is that the total amount is a sum of differences, of degrees measured from a zero-point which though counted as = 0 may be in itself a very positive thing, as, for instance, the state of absolute rest from which degrees of velocity are counted is by no

means a negative notion.] **E. Schwedler.** 'Die Lehre von der Beseeltheit der Atome bei Lotze' (Schluss). [In the evolution of his metaphysical philosophy, Lotze tended more and more to drop the doctrine of animated atoms in favour of a theory which interprets all phenomena as connected energies of the Absolute, retaining the former, if at all, merely as an ornamental adjunct to his system.] **Jonas Cohn.** 'Hegel's Aesthetik.' [Written from a neo-Kantian point of view. Hegel's æsthetic is considered both in relation to the works of his predecessors, and to the rest of his system. Things only appealed to Hegel in their completed form, and so his admiration is reserved for perfect classic art. And he looks on art as a whole merely as a transitional stage in the realisation of the Idea. Hence his inability to appreciate at their full value the works produced since the end of the Middle Ages.] **A. Goedeckemeyer.** 'Der Begriff der Wahrheit.' [Truth is what, under proper conditions of judgment, we cannot but believe. And the proper conditions are that we should eliminate emotional elements, that we should not use words without a distinct consciousness of their meaning, and that we should employ all the means of investigation available.] **Klem. Kreidig.** 'Ueber den Begriff der "Sinnesäuschung".' [Every sense-perception experienced is spontaneously referred to an external reality with certain definite determinations of which it is believed to correspond. These are quality, intensity, and position in space and time. Hence is deduced a fourfold classification of illusions of sense according to the errors committed with regard to one or other of these four determinations. Aristotle was right when he interpreted illusions of sense as errors of judgment.] **K. Vorländer.** 'Kant's Briefwechsel, 1789-1794.' [Extracts from the newly published second volume of Kant's correspondence, which contains ninety letters from and 202 to the philosopher. The details are of little more than bibliographical interest.] Recensions, etc.

PHILOSOPHISCHE STUDIEN. Bd. xviii., Heft 2. **R. Seyfert.** 'Ueber die Auffassung einfachster Raumformen.' [A study of the subjective factors in our estimation and reproduction of triangles was published in volume xiv. The present paper deals with the objective factors, with the following results. (1) A strong and clear contour line is a favourable condition. It assists other favourable conditions (colour upon white background) and can compensate unfavourable (too great distance, small difference of brightness between ground and figure). (2) Correct apprehension is possible without contours, if the angle-points of the triangle are marked. In certain cases, the strain of attention which these dot-figures call for renders their reproduction more accurate than that of the drawn triangles. In all cases strong marking of the angle-points compensates the disadvantage of weak contours. (3) Size and distance of the triangles must be so regulated that the whole figure falls within the yellow spot. Reproduction is at its best when figure and yellow spot are practically coincident. The spatial sensitivity of the retina is greatest within a circumscribed region of the yellow spot; less for points lying the one within and the other without the spot; least for two points lying outside of it. (4) Coloration of the figures is, in general, a favouring condition of their reproduction. Direct colour contrasts are, however, unfavourable. And the brightness-difference of field and figure is always more important than the colour quality of the latter: it remains effective at distances and in illuminations where the colour influence has disappeared. (5) Insufficient illumination is an unfavourable condition: so is (6) fatigue. (7) Æsthetic pleasure enhances accuracy of reproduction, and conversely. The errors show three uniformities: (a) a

shortening of the lines of the figures; (b) a tendency to errors of the same kind; (c) preference for some forms, to the neglect of others. We cannot here enter into the author's explanations of these laws.] **E. Duerr.** 'Ueber das Ansteigen der Netzhauterregungen.' [The results of Exner and Kunkel are not completely concordant; and there are obvious objections to the methods of both observers. Especially must one take account of adaptation. (1) Experiments with Dark Adaptation.—Series of experiments with moving stimuli (slits in a revolving black cylinder) gave no result. The arrangement finally employed was, in brief, as follows: the normal stimulus, exposed for more than the time necessary to reach its intensive maximum, was varied by means of an episcotister; the stimulus of comparison was varied in duration, by change of length of slit in a revolving drum. Since the brightness relations of the stimuli were known, it was only necessary to give the stimulus of comparison such a duration as should make it just equal in intensity, subjectively, to the standard: this duration gave the time required for the intensive rise of the sensation. With colourless stimuli, of the intensity employed, this time of rise was 0.266 sec. Coloured stimuli were obtained by gelatine plates and (yellow) by a 'filter'. The times of rise (although the stimuli were so dark as to be practically colourless for the observer) were: red, 0.541 sec.; blue, 0.543 sec.; yellow, 0.573 and 0.541 sec.; green, 0.541 and 0.691 sec. (the latter value is suspicious). Control experiments with colourless light gave 0.266 and 0.272 sec., the same value as before. (2) Light Adaptation.—The standard stimulus was again regulated by an episcotister; the stimulus of comparison (intrinsically weaker) had its duration varied by varying sections in the periphery of a rotating disc. Results: white light, 0.269, 0.253, 0.271 sec.; weaker stimuli, 0.288 sec.; red, 0.519, 0.535, 0.546 sec.; green, 0.529, 0.519, 0.533 sec.; blue, 0.523, 0.496, 0.521 sec.; yellow, 0.534, 0.497 sec. (For green, blue and yellow the method was slightly modified.) We find, then, as before, a remarkable constancy for the different kinds of homogeneous light, and a marked difference between the times of intensive rise with coloured and colourless stimuli. The coincidence of the times in dark and light adaptation must be explained on the assumption that the time of rise does not change with change in the intensity of stimulus. (3) This assumption is further justified by the results of new experiments with dark adaptation, made with the stimuli of the last series, which were much stronger than those of the first dark series. Finally, the maximal effect that a stimulus can produce, under different conditions, may be calculated from the fact that the stimulus of comparison that can appear equal to a given standard in dark adaptation is 2.75 times as small as that which is judged equal to the same standard in light adaptation, if the stimulation be cut short at the time required for the arousal of the sensation maximum. The author ends with an explanation of the discrepancies between his own results and those of his two predecessors.] **F. S. Wrinch.** 'Ueber das Verhältniss der ebenmerklichen zu den übermerklichen Unterschieden im Gebiet des Zeitsinns.' [Record of experiments (chiefly with times 'filled' by a tuning-fork tone) and theoretical discussion. The principal results are as follows. (1) Work with mean gradations offers no confirmation of Weber's Law: the relative deviation from the geometrical mean increases, for all observers, with increase of the ratio of the two given time-stimuli. On the other hand, minimal change confirms Weber's Law for times between the limits 0.25 and 1.20 secs. This relation between the two methods agrees with the results of Merkel and Ament in the sphere of intensity. (2) The difference limen, for the times indi-

cated, is about 4.5 per cent. (3) Tone-filled times, of the lengths mentioned, show nothing analogous to an indifference time. The error of estimation is always positive, and increases with increase of the normal time. This fact is connected with the other, that Weber's Law shows no lower deviation. The relative difference of estimation is minimal for times from 0.8 to 1.2 secs. (4) Heymans' law of inhibition is inadequate to the results with mean gradations. These results support Kuelpe's conjecture that just noticeable differences increase with the intensity of the limiting sensations, and admit of its extension to temporal comparisons. (5) There is a tendency, in the 'time sense,' to take absolutely equal differences to be equally large. The mid-times of the later series correspond approximately to the arithmetical mean of the limiting times, and there is no evidence of an influence of the position of the time-differences judged.] **O. Kuelpe.** 'Zur Frage nach der Beziehung der ebenmerklichen zu den übermerklichen Unterschieden.' [Detailed reply to the criticism of Lehmann (Die körperlichen Aeusserungen psychischer Zustände, ii., 105) upon the work of Ament (*Philosophische Studien*, xvi.).]

ARCHIV FÜR SYSTEMATISCHE PHILOSOPHIE. Neue Folge. Bd. viii., Heft 4. **U. K. Twardowski.** 'Ueber Sogenannte Relative Wahrheiten.' [The distinction between relative and absolute truth applies only to the outward form in which judgments are expressed. The judgments themselves are either always and unconditionally true or not true at all. All truth is absolute truth.] **D. Koigen.** 'Einsamkeit.' [Examines the various forms and conditions of the spiritual isolation of the individual from the society in which he lives. Special account is taken of the conditions prevailing at the present time.] **W. Smith.** 'What is Knowledge?' ['Knowledge of the self is given in every part of Conscious experience, and knowledge of the not-self, when it is possible, is given in the reproduction of the experience of the not-self.'] Bd. ix., Heft 1. **R. Holzapfel.** 'Wesen und Methoden der sozialen Psychologie.' [Sociology which deals with the relations of social groups must ultimately be founded on the psychology of the relations between individual men leading to an investigation of the way in which *ideals* are formed and transformed.] **Berthold Weiss.** 'Gesetze der Geschehens.' [The "laws" referred to are of the sort which Spencer formulates in his *First Principles*.] **A. Marucci.** 'Saggio Critico della Dottrina della Conoscenza.'

VIERTELJAHRSSCHRIFT FÜR WISSENSCHAFTLICHE PHILOSOPHIE UND SOCIOLOGIE. Jahrgang xxvi. Neue Folge. Heft 4. **Hermann Götz.** 'War Herder ein Vorgänger Darwin's?' [Shows that Herder did not anticipate any of the specially characteristic points of the Darwinian theory.] **S. R. Steinmetz.** 'Die Bedeutung der Ethnologie für die Soziologie.' [Ethnology is far the most important and trustworthy source of sociological data.] Besprechungen, etc.

PHILOSOPHISCHES JAHRBUCH. Bd. xv. Heft 2. **St. Schindele.** 'Die Aristotelische Ethik.' [This is the first of a series of papers in which the writer examines the principles of Aristotle's ethics in view of other systems, both ancient and modern. He considers Aristotle to have erred in positing happiness as the last and highest end of man, and St. Thomas does not succeed in showing that his meaning is in harmony with Christianity.] **Hermann Sträter.** 'Ein modernes Moralsystem.' [The writer continues to attack Wundt's idea of morality. *Will* is not mere consciousness, not a mere intellectual process. The idea of Right, the categorical imperative, demands an *imperans*. There is a development

of morality through the ages; but there is not a double morality, right at one time, wrong at another, or right for one man (a genius) and wrong for another.] **Ch. Willems.** 'Die obersten Seins-und Denkgesetze.' [The author concludes his series of papers by saying that the axioms of identity, contradiction, excluded middle, and sufficient reason, are true for all things; that of causality, only for things which become. But all have objective worth, depending, not upon subjective inability to think otherwise, but upon objective evidence.] **Gregor v. Holtum.** 'Thierisches und menschliches Erkennen.' [The writer, in conclusion, follows Wasman's detailed refutation of Ennery's (and of others') arguments in favour of the intelligence of brutes, and praises his book as a strictly scientific work, which lays fetters upon the irrelevant vagaries of fancy.]

RIVISTA FILOSOFICA. Anno iv., vol. v., Fasc. iii. May-June, 1902. **G. Vidari.** 'Civiltà e Moralità.' [Civilisation understood as intellectual and material development is, notwithstanding some serious drawbacks and dangers, on the whole favourable to morality, chiefly by widening men's conceptions and enlarging their sympathies; while morality is indispensable to civilisation.] **G. Gentile.** 'L'unità della scuola secondaria e la libertà degli studi (continuazione e fine).' [Concludes an animated plea for maintaining a high and uniform standard of secondary education. Culture is essentially aristocratic and should not be degraded to meet the demands of a materialistic democracy. Among other subjects it should include some acquaintance with the New Testament, a subject of which, according to this writer, nearly all educated Italians are lamentably ignorant.] **C. Cantoni.** 'Studi Kantiani.' [Maintains, chiefly against Wartenberg, that Kant's 'thing-in-itself' is no objective reality, but a limiting conception, a purely subjective necessity of thought.] In the *Rassegna Bibliografica* of this number there is a lengthy adverse criticism of Mach's 'Analyse der Empfindungen' (third ed.) from the pen of F. Bonatelli. Vol v., Fasc. iv. September-October, 1902. **G. Vidari.** 'Gaetano Negri.' [Negri represented a whole generation of Italian thinkers who, while rejecting Christianity, came to no clear conception as to the part reserved for it in the future.] **B. Varisco.** 'Pensiero e realtà.' [A rapid summary of Renouvier's metaphysics, to be followed by critical remarks in a future number.] **A. Pagano.** 'La teoria della pena nell' Etica di G. Wundt.' [Expounds with general approval Wundt's theory of punishment, according to which its essential object is to redress the wrong done by the infliction of a corresponding pain on the criminal.] **E. Sacchi.** 'Le idee di Brunetière sulla Tragedia.' [Chiefly about the idea of fate in Greek and French tragedy.] **A. Faggi.** 'Un libro di estetica.' [A few brief adverse remarks on Croce's æsthetic theory.] *Rassegna Bibliografica*, etc.

VIII.—NOTE.

MIND ASSOCIATION.

THE following gentlemen have joined the Association since the printing of last number :—

ADAM (J.), Emmanuel College, Cambridge.

SMITH (Norman), 58 South Woodside Road, Glasgow.

Those who wish to join the Association should communicate with the Hon. Secretary, Mr. HENRY STURT, 5 Park Terrace, Oxford; or with the Hon. Treasurer, Mr. F. C. S. SCHILLER, Corpus Christi College, Oxford, to whom subscriptions should be paid.

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